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The Assyrian Sacred Tree: A History of Interpretations

Giovino, Mariana

Abstract: The so-called Assyrian sacred tree is the most discussed motif in the historiography of Assyrian art. It is familiar from the reliefs in the throneroom of Aššurnasirpal II at Nimrud, but it has a family of close relatives that appear in a variety of other media. To date, no contemporary text has been found that mentions this 'tree,' and, as a result, scholars have not yet arrived at a consensus on its iconography. Nevertheless great efforts have been made to decipher the symbol, ever since A. H. Layard recovered the Nimrud reliefs in the mid-nineteenth century. This book traces the intricate history of the iconographic debate, from 1849 to the present. Scholars have tended towards three principal interpretations of the sacred tree: that it represents the 'tree of life' known from Genesis, or a stylized date palm, or a constructed cult object. The 'tree of life' theory has had few takers since the late nineteenth century (although it has recently enjoyed a small revival); the date palm interpretation, on the other hand, has dominated the discussion since 1890, when E. B. Tylor proposed that winged figures standing on either side of the 'tree' were fertilizing it. This analysis has had a number of serious objections levelled against it from the beginning, but it managed to thrive, primarily because it built up a critical scholarly mass early on in the debate. The third of the main interpretations, the cult object theory, also fell victim to the date palm theory in the middle of the last century, and the details of its argument have been largely forgotten by recent contributors to the debate. In my view it is the most promising of the three, and I build upon the arguments of earlier cult object theorists using archaeological and textual material. This book, then, is a critical historiography, which both surveys the vast literature on this topic and intervenes in the debate. It will be found invaluable by anyone who wishes to study this enigmatic motif, and it will also be of interest to historians of Assyrian art and religious cult. And as an analysis of the ways in which a scholarly debate can fall victim to an implausible consensus, it will provide a useful test case for students in the growing field of historiography.

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by
Susanne Bickel, Othmar Keel and Christoph Uehlinger

Author

Mariana Giovino (b. 1964) is an honorary research fellow in the History Department at University College London. She completed her Ph.D. in the History of Art Department at the University of Michigan, Ann Arbor, and previously completed an M.A. in History of Art and one in Assyriology at the same institution.

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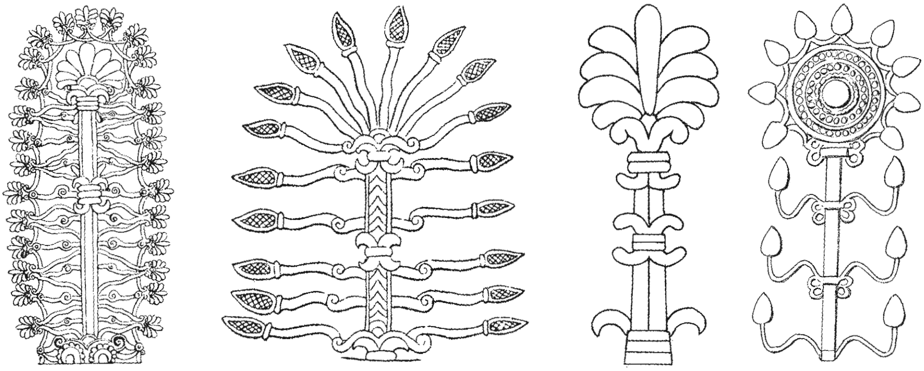
Mariana Giovino

The Assyrian Sacred Tree

A History of Interpretations



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with love

Contents

Acknowledgments VII

Introduction 1

Part I. Nineteenth-century Interpretations of the AST
1 The Garden of Eden 9
2 *Ashêrah* and May-pole 21
3 The date palm 27
4 Fertilization 31
5 Genies and cherubim 39
6 The cone, the bucket and the climate 45

Part II. The Date Palm Theory since 1900
7 Fertilization triumphant 61
8 Resistance to the fertilization theory 77
9 Climatic considerations 91
10 Bucket and cone revisited 103
11 Similarity and symbolism 113
12 Trees of life, fortune and abundance 129
13 *Apkallu* and *kurību* 137

Part III. The Cult Object Theory since 1900
14 Kinds of thing 145
15 Construction work 157
16 The Khorsabad material 163

Part IV. Artificial Trees in the Archaeological Record
17 Artificial trees 177
18 Artifice and the AST 191
Conclusion 197

Bibliography 203

Index 231

List of Figures 237

Figures 243

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Introduction

The 'Assyrian sacred tree' is best defined by pointing to an example. We encounter it behind Aššurnasirpal II's throne in his throneroom at Nimrud (fig. 1)[1] as a 'palmette' on a pole, surrounded by a ruff of other 'palmettes,' which is linked to the pole by some kind of tracery that is hard to describe with precision. On either side of the thing are humans and genies, who appear to be anointing it in some way. It is not easy to work out what is going on in these images—hence the current book—but, from the fact that this treelike thing is depicted numerous times at Nimrud[2] and has a whole family of close relatives[3] that appear throughout Assyrian art in a variety of other media, from cylinder seals to jewelry and depicted textiles, we can safely assume that it was a symbol of exceptional significance to the Assyrians. Unfortunately no Assyrian text discovered to date discusses the nature or purpose of this treelike thing, and, in the absence of the requisite literary evidence, scholars have not yet arrived at a consensus as to its meaning.

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[1] For the excavator's description of the location of this relief behind the king's throne, see A. H. Layard, *Nineveh and its Remains: with an account of a visit to the Chaldæan Christians of Kurdistan, and the Yezids, or Devil-Worshippers; and an enquiry into the manners and arts of the ancient Assyrians*, vol. 1, London, 1849, pp. 133–34, "Behind the king's throne base in the eastern wall there was a recess which contained a great sculpted panel . . . [= our fig. 1]." This relief measures approximately 1.93 m high by 5.32 m wide.

[2] For the approximate total number of 'tree' images decorating the palace, see J. B. Stearns, *Reliefs from the Palace of Ashurnasirpal II*, *Archiv für Orientforschung*, Beiheft 15, Graz, 1961, pp. 67–68, 'Layard's particulars with regards to the use of the tree, although by no means precise, seem to me to indicate that in reliefs . . . it was used approximately 130 times. . . . It is thus apparent that the tree is a more prevalent motif in the palace than the king and more widely distributed than any other motif except the genie in the horned miter.' Most recently see J. M. Russell, 'The Program of Assurnasirpal II at Nimrud: Issues in the Research and Presentation of Assyrian Art,' *American Journal of Archaeology* 102 (1998), p. 689, table 1, where he calculated 190 depicted 'trees' in the palace.

[3] The process of grouping together so many distinct 'treelike' forms under umbrella categories such as 'the Assyrian sacred tree' began as soon as these forms came to light in 1849. A critical analysis of this category as a modern artificial invention has not yet been attempted. Scholars justify this umbrella category in various ways. See, e.g., H. Danthine, *Le palmier-dattier et les arbres sacrés dans l'iconographie de l'Asie occidentale ancienne, Bibliothèque archéologique et historique* 25, t. 2 (plates), Paris, 1937, where Danthine argued that all the 'tree-types' represent a date palm, thus her motivation for subsuming all types into one category. More recently, see S. Parpola, 'The Assyrian Tree of Life: Tracing the Origins of Jewish Monotheism and Greek Philosophy,' *Journal of Near Eastern Studies* 52 (1993), pp. 200–1, 'Appendix A, Glyptic Variants of the Assyrian Tree,' where Parpola provided a chart of known 'tree-variants.' Parpola argued that the 'treelike' symbols have 'characteristic features' that unify all the variants into one category and that these characteristic features correspond to specific 'triadic configurations of nodes, volutes and circles' representing ultimately the 'Sefirotic Tree.'

They have, however, tried very hard to reach that consensus. The 'sacred tree' is often said, probably correctly, to be the most discussed symbol in the historiography of Assyrian art.[4] This study analyzes the vast secondary literature on the object, a literature that spans over 150 years. Scholarly discussion has revolved around three principal interpretations.[5] One interpretation, first proposed in 1849, abandoned at the beginning of the last century and then unexpectedly revived in 1993, is that the 'tree' represents the 'tree of life' known from Genesis 2–3. Early scholars thought they had secured this theory once they had identified the tree from the Garden of Eden with the tree known from cuneiform sources as the *kiškānû*.[6] A second interpretation, first proposed in 1888 and much the most popular of the three, maintains that the Assyrian 'tree' is a symbol of a real tree; that is, it should be understood as a conventionalized or stylized depiction of a date palm.[7] In 1890 a further elaboration of this theory asserted that the 'palm' was being 'fertilized' by genies. The third interpretation, first proposed in 1864 but overshadowed by the triumphant date palm theory, is that the 'tree' is not in fact a tree, and neither is it a conventionalized depiction; rather, it is a representation, a fairly accurate representation given the visual language of Assyrian art, of a constructed cult object.

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[4] See, e.g., E. D. van Buren, *Symbols of the Gods in Mesopotamian Art*, *Analecta Orientalia* 23, Rome, 1945, p. 22, 'The significance and purpose of the sacred tree has given rise to more discussions than almost any other mythological subject.' Van Buren made this remark over sixty years ago. Since then the number of scholarly publications concerned with the identity and meaning of the Assyian sacred tree has more than doubled.

[5] There are several other ideas of what this 'tree' represents, and since these are all linked to the three principal interpretations, these other ideas are addressed in the notes of this book. For the idea that it represents the cosmic tree, see below n. 6; a living tree (besides the date palm), see n. 23; or all the deceased kings listed in the Assyrian king list, see n. 329.

[6] Another related interpretation entered the scholarly literature at the time of the 'tree of life' idea, i.e., that the 'tree' represented a 'world tree' or 'cosmic tree.' This idea was inspired by and linked to the 'tree of life' interpretation; however, it never attracted much attention and has, for the most part, been discarded. For these early discussions concerning the Assyrian sacred tree as a world tree or cosmic tree (which then came to be identified in texts as the *kiškānû*), see F. Lenormant, *Les origines de l'histoire d'après la Bible et les traditions des peuples orientaux*, Paris, t. 1, 1880, pp. 95–96, 570 (and also Lenormant, *The Beginnings of History According to the Bible and the Traditions of Oriental Peoples,* trans. M. Lockwood, London, 1883, p. 104), and Lenormant, *Les origines de l'histoire d'après la Bible et les traditions des peuples orientaux,* Paris, t. 2/1, 1882, pp. 103–4; A. H. Sayce, *The Hibbert Lectures, 1887, Lectures on the origin and growth of religion as illustrated by the religion of the ancient Babylonians,* London, 1887, pp. 238–39; A. E. Terrien de Lacouperie, 'The Calendar Plant of China, the Cosmic Tree, and the Date Palm of Babylonia,' *The Babylonian and Oriental Record* 4/10 (1890), pp. 221–22; E. Goblet d'Alviella, *The Migration of Symbols,* Westminster, 1894, pp. 155–57; and A. Jeremias, *Handbuch der altorientalischen Geisteskultur*, Leipzig, 1913, pp. 60–61. Recently, however, the idea that the Assyrian sacred tree represents the cosmic tree has been reintroduced by S. Parpola, 'The Ideology of Assyrian Kingship: Sons of God,' http://www.algonet.se/~hujada/arkiv/0011/parpola.html (November 2000), pp. 1–2.

[7] 'Conventionalized' refers to an image that is 'stylized, arbitrary, represented by a symbolic or emblematic form (versus a naturalistic form).' Therefore, the so-called tree is 'an emblem which represents something else,' i.e., a date palm. Nineteenth-century scholars, who recognized formal similarities between the Assyrian sacred tree and a date palm,

In part I of this book I discuss the nineteenth-century origins of these theories. Part II continues the story of the date palm interpretation through the twentieth century. In part III I return to the cult object theory and describe the theories put forward by its principal exponents since 1900. In part IV I conclude with a survey of archaeological evidence that could (and should) have been used by cult object theorists, and I show how this evidence can point the way to future research.

In all of this I do not pretend to be unbiassed. In my opinion the cult object theory has been unjustly sidelined; it has much to commend it, and the other theories have many obvious flaws. As I present the history of the date palm theory I make critical comments that seek to undermine that theory; and throughout my discussion of the cult object theory, I adduce further archaeological and textual material in order to strengthen the arguments of earlier authors.

Although I am not an impartial observer of the debate, I hope that the historiographic value of my work will not be rendered null by my theoretical predilections; and that my summary of the primary literature is a helpful path through the dense forest of historical interpretation. Like many large scholarly literatures in the humanities, the 'sacred tree' literature is forgetful, poorly signposted and repetitive, and I hope that this work will save future researchers a large amount of labor, improve the quality of literature summaries at the beginning of articles, and cut down the number of times the wheel is reinvented by scholars whose preparatory reading has been patchy. Not that they can be blamed; it takes years to hunt down, read and digest all this material. With the humanities literature continuing to grow as if there were no tomorrow, surveys of the secondary literature like this one will, I am sure, become increasingly common.

An historiographic study of this kind is not merely a useful research map; it can also develop our awareness of how certain ideas survive and others succumb to the process of scholarly evolution. The fittest theories are not always based on better evidence than the weaker theories that they replace. Quite why and how bad theories conquer good theories is a subject worthy of study. In my opinion the main reason for the triumph of the date palm interpretation is that it built up a kind of scholarly critical mass. By the early twentieth century an influential group of scholars had been won round to the theory, and the point was reached where it

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referred to the so-called tree in this way. (For these definitions of 'conventional,' see *Chambers Dictionary*, rep., 1986.)

slyly metamorphosed from a passing consensus into an established fact. We take it for granted that we know what this thing represents, so most studies of the Assyrian 'sacred tree' for the last seventy-five years have been devoted to analyzing what the 'tree' means. Scepticism about its pre-iconographic identity—what manner of thing are we looking at?—has been largely abandoned.[8] And yet such questioning is, I think, the most fruitful way to approach the 'sacred tree.' This study focusses in particular on the work of scholars who have made important contributions of a pre-iconographical nature, since I believe that their insights are most likely to be helpful for future research.

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[8] By using the word 'pre-iconographical' here, and later on 'iconography,' I am referring to terms defined by Erwin Panofsky in idem, 'Introductory,' *Studies in Iconology*, Oxford and New York, 1939, pp. 3–17, and idem, 'Iconography and Iconology, An Introduction to the Study of Renaissance Art,' in *Meaning in the Visual Arts*, Garden City, NY, 1955, pp. 26–54. Panofsky distinguished three strata in his analysis of a work of art (i.e., 'pre-iconographical description,' 'iconographical analysis,' and 'intrinsic meaning or content' or 'iconography in a deeper sense'—which he designated as 'iconology' in 1955). For his definition of 'pre-iconographical,' see idem, 1939, p. 5, '[This involves] identifying pure *forms*, that is: certain configurations of line and colour, or certain peculiarly shaped lumps of bronze or stone, as representations of natural *objects* such as human beings, animals, plants, houses, tools and so forth; by identifying their mutual relations as *events*; and by perceiving such *expressional* qualities as the mournful character of a pose or gesture, or the homelike and peaceful atmosphere of an interior. The world of pure *forms* thus recognized as carriers of *primary* or *natural meanings* may be called the world of artistic *motifs*. An enumeration of these motifs would be a *pre-iconographical* description of the work of art' (emphasis his). For his definition of 'iconographical analysis,' see idem, 1939, pp. 6–7, '[This involves] realizing that a male figure with a knife represents St. Bartholomew, that a female figure with a peach in her hand is a personification of Veracity, that a group of figures seated at a dinner table in a certain arrangement and in certain poses represents the Last Supper, or that two figures fighting each other in a certain manner represent Vice and Virtue. In doing this we connect artistic *motifs* and combinations of artistic *motifs* (*compositions*) with *themes* or *concepts*. *Motifs* thus recognized as carriers of a *secondary* or *conventional* meaning may be called *images* and combinations of images are . . . called . . . *stories* and *allegories*. The identification of such *images*, *stories* and *allegories* is the domain of iconography. . . . It is obvious that a correct *iconographical analysis* presupposes a correct identification of the *motifs*' (emphasis his). For his definition of 'intrinsic meaning or content' or 'iconography in a deeper sense,' see idem, 1939, pp. 7–8, '[This involves] ascertaining those underlying principles which reveal the basic attitude of a nation, a period, a class, a religious or philosophical persuasion—unconsciously qualified by one personality and condensed into one work. . . . In thus conceiving of pure forms, motifs, images, stories and allegories as manifestations of underlying principles, we interpret all these elements as what Ernst Cassirer has called "*symbolical*" *values*. . . . The discovery and interpretation of these "*symbolical*" *values* (which are generally unknown to the artist himself and may even emphatically differ from what he consciously intended to express) is the object of what we may call *iconography in a deeper sense*: of a method of interpretation which arises as a synthesis rather than as an analysis. And as the correct identification of the *motifs* is the prerequisite of a correct *iconographical analysis in the narrower sense*, the correct analysis of *images, stories* and *allegories* is the prerequisite of a correct *iconographical interpretation in a deeper sense* . . .' (emphasis his). Panofsky's ideas have been criticized by various authors; in the field of ancient Near Eastern studies, see I. Winter, '*Le palais imaginaire*, Scale and Meaning in the Iconography of Neo-Assyrian Cylinder Seals,' in *Images as Media, Sources for the Cultural History of the Near East and Eastern Mediterranean (first millennium BCE), Proceedings of an International Symposium held in Fribourg on November 25–29, 1997,* C. Uehlinger, ed., *Orbis Biblicus et Orientalis* 175, Fribourg and Göttingen, 2000, pp. 75–83,

As already observed, there are different theories about the identity of the Assyrian sacred tree or cult object, and advocates of these theories refer to it in a number of ways, as the 'sacred tree,' 'stylized tree,' 'Assyrian tree,' or 'tree of life.'[9] Throughout this book, I have used the abbreviation 'AST' to refer to the image of the tree, cult object, or whatever it is,[10] aware that the letter 'T' can be taken to refer to 'tree' or 'thing' by partisans of different theories. I add the letter 'S' for 'sacred' because that adjective emphasizes the cultic context in which we usually find the AST; but those who think that this is a theoretical step too far can think of 'S' as standing for 'secular' or 'strange.' Of course 'A' stands for the (Neo-)'Assyrian' period during which this symbol proliferated, that is, the ninth to seventh centuries BC. The point is simply to find a way of describing the object of our study that is theoretically flavorless and thus to avoid endless quotation marks, uses of 'so-called' and so forth, and to prevent ourselves from naming the thing before we have amassed enough evidence to identify it.

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and O. Keel, *Das Recht der Bilder gesehen zu werden. Drei Fallstudien zur Methode der Interpretation altorientalischer Bilder*, *Orbis Biblicus et Orientalis* 122, Fribourg and Göttingen, 1992, pp. 20–23, 267–73.

[9] See, e.g., van Buren, 1945, pp. 22–29, 'sacred tree'; H. York, 'Heiliger Baum,' *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 4 (1972–75), pp. 269–80; J. Black and A. Green, *Gods, Demons and Symbols of Ancient Mesopotamia, An Illustrated Dictionary*, Austin and London, 1992, pp. 170–71, 'stylised tree and its "rituals"'; A. Green, 'Ancient Mesopotamian Religious Iconography,' in J. M. Sasson, ed., *Civilizations of the Ancient Near East*, vol. 3, New York, 1995, pp. 1838, fig. 1, no. 11, 'stylized tree'; J. Black and A. Green, 'Stylized tree,' in P. Bienkowski and A. Millard, eds., *British Museum Dictionary of the Ancient Near East*, London, 2000, p. 279. (Since the mid-1990s, the phrase 'Assyrian tree' has become interchangeable with 'stylized tree.') See, e.g., Parpola, 1993, 'tree of life.'

[10] Also on occasion, as a form of shorthand, to the thing itself.

PART I

Nineteenth-century Interpretations of the AST

1 The Garden of Eden

That the AST should have received so much attention, so very early on in the life of ancient Near Eastern studies, was an historical accident. In 1847 the celebrated archaeologist Austen Henry Layard decided to devote his archaeological attention to the mound at Nimrud, and AST images happened to be unusually well preserved and numerous at this site. Recovery of the AST at the other Neo-Assyrian palaces excavated between 1843 and 1853 was not nearly so impressive.[11] While AST images do occur repeatedly in the material record from c. 883 to 627 BC, mainly on cylinder and stamp seals, it is rare to find the AST represented on the walls of later Neo-Assyrian royal buildings. For the most part, we know of later sculpted examples of the AST from relatively few fragmentary remains.[12]

Fig. 2 shows another type of the AST from Nimrud, and, like fig. 1, it also adorned the throneroom of Aššurnasirpal II. Here we see two winged, bird-headed creatures ritually attending to the AST, a composition frequently seen in the palace.[13] It appeared to Layard, when he first saw it, that it was obviously linked to the 'tree of life' of Genesis chapters 2 and 3. In 1849 he wrote,

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[11] Nimrud was one of the first of the Neo-Assyrian palaces to be excavated at that time on a large scale. P. É. Botta conducted the earliest successful excavation of a Neo-Assyrian palace when he recovered the palace of Sargon II at Khorsabad in 1843. Layard recovered Aššurnasirpal II's Nimrud Palace in c. 1845. By 1853 the palaces of Tiglath-Pileser III and Esarhaddon at Nimrud, and those of Sennacherib (704–681 BC) and Aššurbanipal at Nineveh, had been at least partially excavated.

[12] For sculpted images of the AST after Aššurnasirpal II (883–859 BC), see a glazed brick panel from the 'review palace' at Fort Shalmaneser at Nimrud, from the reign of Shalmaneser III (858–824 BC); a large stone wall relief and two stone wall relief fragments from Nimrud, from the reign of Tiglath-Pileser III (744–727 BC); one stone wall relief fragment from Khorsabad, from the reign of Sargon II (721–705 BC), but see P. Albenda below; a black basalt stele or 'memorial' stone with an image of the AST (together with seven other figures), from the reign of Esarhaddon (680–669 BC); and ASTs carved in stone relief on Aššurbanipal's (668–627 BC) garment, on the walls at Nineveh. For bibliography and some illustrations of these sculpted remains, see E. Bleibtreu, *Die Flora der neuassyrischen Reliefs: eine Untersuchung zu den Orthostatenreliefs des 9.–7. Jahrhunderts v. Chr., Wiener Zeitschrift für die Kunde des Morgenlands*, Sonderband 1, Wien, 1980. See also P. Albenda, *The Palace of Sargon, King of Assyria, Monumental Wall Reliefs at Dur-Sharrukin, from Original Drawings Made at the Time of Their Discovery in 1843–1844 by Botta and Flandin, Éditions Recherches sur les Civilisations, Synthèse* no. 22, Adaptation into French by A. Caubet, under the title *Le palais de Sargon d'Assyrie*, Paris, 1986, pp. 57–58, and pls. 62, 73, 76, 80, 131, 135, for a description and drawings of the AST that originally decorated some of the rooms of Sargon II's palace at Khorsabad.

[13] According to Russell, out of 190 AST depictions in the palace, this composition of AST flanked on either side by a winged figure occurs 78 times (or 41% of the total number of AST compositions); see Russell, 1998, p. 689, table 1. This wall relief measures 1.18 m high, 1.63 m wide.

> From the constant introduction of the tree ornamented with . . . circular flowers with five or more petals, or resembling the Greek honeysuckle, into groups representing the performance of religious ceremonies, there cannot be a doubt that they were symbolical and were invested with a sacred character. The sacred tree, or tree of life, so universally recognised in Eastern systems of theology, is called to mind, and we are naturally led to refer the traditions connected with it to a common origin.[14]

When Layard saw the winged, bird-headed figures, and others like them, he thought of the prophet Ezekiel exiled in 'Assyria,'[15] whose vision at the beginning of his book, Layard felt, must have been inspired by what he saw in captivity.

> As the prophet had beheld the Assyrian palaces, with their mysterious images and gorgeous decorations, it is highly probable that, when seeking to typify certain divine attributes, and to describe the divine glory, he chose forms that were not only familiar to him, but to the people whom he addressed—captives like himself in the land of Assyria. Those who were uncorrupted by even the outward forms of idolatry, sought for images to convey the idea of a Supreme God. Ezekiel saw in his vision the likeness of four living creatures, which had four faces, four wings, and the hands of a man under their wings on their four sides. Their faces were those of a man, a lion, an ox, and an eagle. By them was a wheel, the appearance of which 'was as it were a wheel in the middle of a wheel.' (Ezek. 1:16) It will be observed that the four forms chosen by Ezekiel to illustrate his description—the man, the lion, the bull, and the eagle,—are precisely those which are constantly found on Assyrian monuments as religious types. The 'wheel within wheel,'

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[14] A. H. Layard, *Nineveh and its Remains: with an account of a visit to the Chaldæan Christians of Kurdistan, and the Yezids, or Devil-Worshippers; and an enquiry into the manners and arts of the ancient Assyrians*, vol. 2, London, 1849, p. 472. Further, in a note: 'We have the tree of life of Genesis, and the sacred tree of the Hindus, with its accompanying figures—a group almost identical with the illustrations of the fall in our old Bibles. The Zoroastrian Homa, or sacred tree, was preserved by the Persians, almost as represented on the Assyrian monuments until the Arab invasion. . . .'

[15] Ezekiel 1.1–3 tells us he was exiled somewhere on Babylonian territory, 'It was the thirtieth year in the fourth month on the fifth of the month, as I was among the exiles by the Chebar canal, that the heavens opened and I saw a divine vision. On the fifth of the month—that was the fifth year of King Jehoiachin's exile—it happened that the word of YHWH came to the priest Ezekiel son of Buzi in the land of the Chaldeans by the Chebar canal, and the hand of YHWH came upon him there.' See *Ezekiel 1–20, A New Translation with Introduction and Commentary, The Anchor Bible* 22, trans. M. Greenberg, Garden City, NY, 1983, p. 37. The Chebar canal is believed to lie near Nippur, according to a document from the Murašu archive (see p. 40).

> mentioned in connection with the emblematical figures, may refer to the winged circle, or wheel, representing at Nimroud the supreme deity. These coincidences are too marked not to deserve notice; and do certainly lead to the inference, that the symbols chosen by the prophet were derived from the Assyrian sculptures.[16]

For Layard, the Biblical texts were essential in helping him decipher the images he had uncovered. There were others, however, who denied this correspondence between the Genesis tree and the AST. Referring directly to Layard's observation regarding the 'sacred tree' as the Biblical 'tree of life,' the ancient historian and canon George Rawlinson remarked in the 1860s,

> An analogy has been suggested between this Assyrian emblem [the AST] and the Scriptural 'tree of life,' which is thought to be variously reflected in the multiform mythology of the East. Are not such speculations somewhat over-fanciful? There is perhaps, in the emblem itself, which combines the horns of the ram—an animal noted for its procreative power—with the image of a fruit- or flower-producing tree, ground for supposing that some allusion is intended to the prolific or generative energy in nature; but more than this can scarcely be said without venturing upon mere speculation. The time will perhaps ere long arrive when, by the interpretation of the mythological tablets of the Assyrians, their real notions on this and other kindred subjects may become known to us. Till then, it is best to remain content with such facts as are ascertainable, without seeking to penetrate mysteries at which we can but guess, and where, even if we guess aright, we cannot know that we do so.[17]

Rawlinson's advice to seek answers from mythological tablets was taken up by the philologist Archibald Henry Sayce, who claimed in 1887 to have found textual support for identifying the AST as the 'tree of life.' His evidence came in the form of an Akkadian text of the Assyrian period that referred to a certain '*kiškānû*.' The determinative giš, which uniformly accompanies the Sumerian version ('$^{\text{giš}}$kín') of the Akkadian '*kiškānû*,' denotes a tree, wood or wooden object. Therefore, the *kiškānû* must have been a tree or wooden object of some sort. For Sayce, the description and location of this object led him to believe he had discovered the Mesopotamian precursor of the 'tree of life.' Sayce's translation of that text (which is now known as *CT* 16, 46) reads as follows:

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[16] Layard, 1849, vol. 2, pp. 464–65.

[17] G. Rawlinson, *The Five Great Monarchies of the Ancient Eastern World; or, The History, Geography, and Antiquities of Chaldea, Assyria, Babylon, Media, and Persia, collected and illustrated from Ancient and Modern Sources*, vol. 2, London, 1864, p. 238, who, in a note, referred directly to Layard's observation quoted above. Rawlinson subsequently reiterated this view in G. Rawlinson, *Five Great Monarchies*, vol. 2, 2nd ed., London, 1871, p. 9; and idem, *The Seven Great Monarchies of the Eastern World: or, the History, Geography and Antiquities of Chaldaea, Assyria, Babylon, Media, Persia, Parthia, and Sassanian or New Persian Empire,* vol. 1, New York, 1885, pp. 345–46.

Rawlinson compared the AST images adorning Neo-Assyrian palaces with the *ashêrah* mentioned in the Old Testament. For this, see chapter 2 below. As an orthodox canon of the Church of England, Rawlinson may have refused to acknowledge any relation between the AST and the Biblical 'tree of life,' preferring to see the 'tree' as analogous to the pagan *ashêrah*. For this possibility and generally on Rawlinson's views on Mesopotamian religion and the Bible, see M. T. Larsen, 'Seeing Mesopotamia,' in A. C. Gunter, ed., *The Construction of the Ancient Near East, Culture and History* 11, Copenhagen, 1992, pp. 122–25.

> line 26 (In) Eridu a stalk (palm-tree?) grew over-shadowing;
> in a holy place did it become green;
> Its root was of white crystal which stretched towards the deep;
> (Before) Ea was its course in Eridu, teeming with fertility;
> Its seat was the (central) place of the earth;
> Its foliage was the couch of Zikum (the primæval) mother.
> Into the heart of its holy house which spread its shade like a forest hath no man entered.
> (There is the home) of the mighty mother who passes across the sky.
> (In) the midst of it was Tammuz.
> ....Fragmentary line...........................
> (There is the shrine?) of the two (gods).[18]

Sayce translated the word *kiškānû* in line 26 as 'stalk' or 'palm-tree?.'

Sayce was the first to identify this passage as the description of a Babylonian equivalent of the Biblical paradise. The main piece of evidence was mention of the *kiškānû*, which Sayce interpreted as a sacred tree or plant growing in a holy place. Other elements, though, also appeared paradisiacal to Sayce and his followers: the teeming fertility, the godly inhabitants, and the restriction placed on humans, who were not allowed to enter the holy area.[19]

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[18] Sayce, 1887, p. 471, lines 26–35. This constitutes a portion of the entire text referred to initially as *W.A.I.* [*Western Asiatic Inscriptions*] iv, 15, published by H. Rawlinson, *The Cuneiform Inscriptions of Western Asia*, vol. 4, *A Selection from the Miscellaneous Inscriptions of Assyria,* London, 1875, pl. 15 (see the reverse, lines 52–62, for the *kiškānû* passage). See also H. Rawlinson's second edition of this volume, 1891, and pl. 15*. This text was republished by R. C. Thompson as *CT* [*Cuneiform Texts*] 16, 46, who has provided the most complete version of the text to date: see R. C. Thompson, *The Devils and Evil Spirits of Babylonia,* vol. 1, *Luzac's Semitic Text and Translation Series* 14, London, 1903, pp. 200–7.

[19] See T. G. Pinches, *The Old Testament in light of the Historical Records of Assyria and Babylonia,* London, 1902, p. 72, 'The probability that it was conceived by the Babylonians as a garden [of Eden] is strengthened by the fact that the god [Ea], and his path, i.e. the rivers, filled the place with fertility, and it was, moreover, the abode of the river-god Nammu, whose streams, the Tigris and Euphrates, flowed on both sides. There, too, dwelt the Sun, making the garden fruitful with his ever-vivifying beams, whilst "the peerless mother of Tammuz," probably a name of Damkina [Ea's consort], added, by

Sayce did not provide a transliteration of this bilingual text (written in both Sumerian and Akkadian) in any of his publications, only the English translation. His earliest translation of 1880[20] appeared just before that of the archaeologist and philologist François Lenormant, who, in 1882, had transliterated and translated texts found on a series of related tablets, including the one quoted here.[21] At that time, only a small portion of the series was available to philologists, so the translations of both Lenormant and Sayce were necessarily incomplete, as was the context for understanding these passages as part of a larger incantation text. The lines succeeding the *kiškānû* portion had not yet been identified. The preceding lines describe a legend of the fire god, Gibil, and evil demons, called the 'Seven.' Ea and his son Marduk also appear in this Gibil legend. Following the legend is our text, and immediately following our text there was a break in the tablet.

Sayce understood our passage and the preceding legend to be two separate items of two different genres: the first one he thought to be a 'magical text,' which ended with the word 'incantation'; and the second, shorter text, a mythological story describing a Mesopotamian version of the Garden of Eden with an equivalent 'tree of life.' The break in the tablet was taken by Sayce and others to indicate that the *kiškānû* passage was a discrete text.[22]

Sayce suggested the *kiškānû* be identified as a stalk or date palm or a cedar tree. He also thought it was represented on the walls of Aššurnasirpal

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her fructifying showers, to the fertility that the two great rivers brought down from the mountains from which they flowed. Reinforcing the parallel with the Biblical Eden, it was represented as a place to which access was forbidden, for "no man entered its midst," as in the case of the Garden of Eden after the fall.' Prior to Pinches, see Goblet d'Alviella, who reprinted Sayce's translations and interpretations of the *kiškānû* incantation in Goblet d'Alviella, 1894, p. 157 and passim.

[20] See G. Smith, *The Chaldaean Account of Genesis—Containing the Description of the Creation, the Fall of Man, the Deluge, the Tower of Babel, the Times of the Patriarchs, and Nimrud; Babylonian Fables and Legends of the Gods; from the Cuneiform Inscriptions*, new ed., rev. (with additions), by A. H. Sayce, London, 1880, pp. 85–86.

[21] Lenormant published materials provided by H. Rawlinson, among them *CT* 16, 46 [= *W. A.I.* iv 15]; see his translation of the *kiškānû* passage in Lenormant, t. 2/1, 1882, p. 104, 'Dans Eridou a crû un pin noir, dans un lieu pur il a été formé; son [fruit] est de cristal brillant, tourné en face de l'Océan; le . . . de Êa est son pâturage, dans Eridou abondance féconde de sa plénitude; son siége est le lieu (central) de la terre, sa racine le lit de la déesse Babi, le [bocage] saint de la demeure, dont l'ombre est épaisse comme celle d'une forêt, personne n'y est entré, [dans la demeure] de la grande mère qui a enfanté le dieu Anou.' (The brackets are Lenormant's.) See p. 104, n. 6 for his transliteration of the Sumerian and Akkadian.

[22] See Sayce, 1887, p. 471 for the translated text, where dividing lines have been inserted to separate the *kiškānû* passage (lines 26–35) from what preceded and followed it. And see Pinches, 1902, p. 71, who described the passage as a discrete entity, 'Here [line 35 of Sayce's translation] the text breaks off, and where it again becomes legible, the phrases are those of an ordinary incantation, whose connecting link with the above poetical lines is lost. It is a pity that the fragment is so imperfect, but such as it is, it gives some very important and interesting details.'

II's palace, that is, as our AST.[23] He identified both of these trees with the 'tree of life' of Genesis.

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[23] Sayce was of many minds concerning the botanical identity of the AST, i.e., he thought it was a stalk, a vine, a date palm, or an amalgamation of a date palm and a cedar. See Sayce, 1887, p. 471, where he translated *kiškānû* as 'stalk (palm-tree?)'; and again op. cit., 238, n. 2, where he refers us to Fritz Hommel's reading of *kiškānû* as 'palm tree': 'Hommel . . . very ingeniously reads . . . gis-kin [as] [Sumerian] mus-kin, from which he derives the [Akkadian] *mušukkanu* . . . , "a palm." But the Semitic rendering is not *ukkanu*, as he reads, but *kiskanu*, from the Accadian *giskin*. The palm was the sacred tree of Babylonia, and Adar was "lord of the date."' For the Hommel passage, see F. Hommel, *Die semitischen Völker und Sprachen, als erster Versuch einer Encyclopädie der semitischen Sprach- und Alterthums-Wissenschaft,* Bd. 1, 'Die vorsemitischen Kulturen in Aegypten und Babylonien,' Leipzig, 1882, p. 406, 'Das Wort *kin*, bezw. (*gish*)*kin* d.i. der *kin*-Baum wird in der assyrischen Interlinearübersetzung durch *ukkanû* wiedergegeben; die nordbabylonische (akkadische) [=Sumerian] Form wäre (*mush*)*kin* und aus dieser, glaube ich, ist jenes *mushukkannu*, dessen Bedeutung Palme erst kürzlich Schrader festgestellt hat, semitisirt.' (Cf. E. Schrader, *Die Keilinschriften und das Alte Testament*, Giessen, 1878, passim.) Sayce, 1887, p. 240, n. 1, seems to support Hommel's palm interpretation, 'It is pretty clear from the sculptures that the sacred tree of the Babylonians was the cedar, which was subsequently displaced by the palm; so that Hommel's view, which sees a palm in the "stalk" of Eridu, may still be maintained.' By 1898, Sayce translated *kiškānû* outright as 'the sacred palm tree'; see Sayce, 'Eden,' in J. Hastings, ed., *A Dictionary of the Bible dealing with its Language, Literature, and Contents including Biblical Theology,* vol. 1, Edinburgh, 1898, p. 643. However, by 1902, his translation had changed to 'vine.' Yet there, in a note, Sayce concedes, 'Perhaps Hommel is right in translating "palm"'; see Sayce, *The Religions of Ancient Egypt and Babylonia, The Gifford Lectures on the Ancient Egyptian and Babylonian Conception of the Divine*, Edinburgh, 1902, p. 386, n. 1.

For the possibility that the AST could be an amalgamation of a cedar and date palm, see Sayce, 1887, pp. 241–42, 'It is possible that, as time went on, another tree became confounded with the original tree of life. The palm was from the earliest period characteristic of Babylonia; and while its fruit seemed to be the stay and support of life, the wine made from it made "glad the heart of men." Date-wine was largely used, not only in Babylonian medicine, but in the religious and magical ceremonies of Babylonia as well. It is not at all improbable, therefore, that the later Babylonian tree of life, with its strange conventional form, was an amalgamation of two actual trees, the cedar and the palm. It is even possible that while one of them, the cedar, was primarily the sacred tree of Eridu, the other was originally the sacred tree of some other locality of Chaldæa.'

This idea, that the AST-as-*kiškānû* represented a living tree (besides, or in addition to, the date palm) was generally discussed at this time. There were a variety of opinions (besides those of Sayce): see, e.g., Smith/Sayce, 1880, p. 85 (pine); Hommel, 1882, p. 406 (palm); Lenormant, t. 2/1, 1882, p. 104 (pine); C. J. Ball, *Light from the East, or The Witness of Monuments, An Introduction to the Study of Biblical Archaeology*, London, 1899, p. 29 (palm or conifer); Pinches, 1902, p. 71, 76 (vine); A. Jeremias, *Das Alte Testament im Lichte des Alten Orients. Handbuch zur biblisch-orientalischen Altertumskunde*, Leipzig, 1904, p. 99 (palm); A. Wünsche, 'Die Sagen vom Lebensbaum und Lebenswasser: altorientalische Mythen,' *Jaarbericht Ex Oriente Lux* 1, 2/3 (1905), pp. 1–2 (palm); W. H. Ward, *The Seal Cylinders of Western Asia, Carnegie Institution of Washington,* publication no. 100, Washington, DC, 1910, pp. 233–24 (palm). The botanist Paul Popenoe later quoted Sayce's translation of *CT* 16, 46 in order to show that the *kiškānû* is a date palm (and also the 'tree of life'): see chapter 7 below for a discussion of P. Popenoe, *The Date Palm*, 1924, ed. Henry Field, Miami, FL, 1973, pp. 6–7, 11.

> [The *kiškānû* was] the cedar . . . [that] was employed . . . in [various other] incantations and magical rites . . . to restore strength and life to the human frame. It was thus essentially 'a tree of life,' and the prototype and original of those conventional trees of life with which the walls of Assyrian palaces were adorned. Those who have visited the Assyrian collection of the British Museum will remember the curious form which it generally assumes, as well as the figures of two cherubs which kneel or stand before it on either side. At times they are purely human; at other times they have the head of a hawk and hold a cone—the fruit of the cedar—over the tree by whose side they stand.[24]

Sayce had a strong motivation for identifying the Biblical 'tree of life' with the *kiškānû*. He believed the *kiškānû* passage described the location of the Garden of Eden. In the passage just quoted, we note the presence of a magnificent tree, the *kiškānû*. On another (unrelated) Akkadian tablet, Sayce thought he had found a reference to Eden. On this second tablet, Sayce read two Sumerian words: $^{\text{dingir}}$edin/eden, where dingir means 'deity' and edin, to Sayce, conveyed the location of the Biblical paradise. His full translation of the phrase $^{\text{dingir}}$edin is 'the divine lady of Eden,' whom he understood to be 'the goddess of the tree of life.'[25] Sayce argued that Eden and the 'tree of life' were located in southern Mesopotamia, specifically in Eridu, home of the *kiškānû*.[26]

Sayce knew that the Sumerian edin means 'desert' or 'steppe,' and he argued that edin was probably related etymologically to the Hebrew word

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[24] Sayce, 1887, p. 241. Sayce maintained that the *kiškānû* was represented by the AST: see Sayce, 1898, p. 643, '[In] Eridu . . . grew the sacred palm-tree—the tree of life—whose roots of bright lapis lazuli were planted in the cosmic abyss, whose position marked the center of the world, and whose foliage was the couch of the goddess Bahu, while the god Tammuz dwelt in the shrine under the shadow of its branches, within which no mortal had ever entered. . . . This tree of life is frequently represented in the Assyrian sculptures, where it is depicted with two guardian spirits or cherubs, kneeling or standing on either side of it.'

[25] Sayce, 1887, p. 238, n. 1, '[The] mother (and wife) [of Tammuz] is called "the lady of Edin," (*W.A.I.*, ii, 59, 10, 11)'; and 240, n. 1, '. . . in *W.A.I.*, ii, 59. *Rev.* 10, "the divine Lady of Eden" is called "the goddess of the tree of life" in the Accadian of north Babylonia, "the goddess of the vine" in the Sumerian of south Babylonia.' Goblet d'Alviella, 1894, p. 153, adopted Sayce's translation regarding 'the goddess of the tree of life' when he wrote '. . . certain cuneiform texts seem to prove that the Assyro-Chaldæans were acquainted with a "Tree of Life." Whether it was thus styled because it served as a *simulacrum* of the Goddess of Life, or whether it represented this divinity by reason of its own mythical function, the fact is none the less certain, according to Mr. Sayce, that the "divine Lady of Eden," or Edin, was termed in Northern Babylonia "the goddess of the Tree of Life". . . .' Assyriologists now translate the goddess named $^{\text{d}}$EDIN in Sumerian as Šerua or Erua in Akkadian. In texts of the late second to first millennium BC, Ṣarpānītu (consort of Marduk) was worshipped under the name Erua.

[26] Sayce, 1887, pp. 237–38, '. . . the primitive home of Tammuz had been in that "garden" of Edin, or Eden, which Babylonian tradition placed in the immediate vicinity of Eridu.'

ʿēden, ‘plain’ or ‘steppe.’ There were grounds for this claim. A Sumerian vocabulary list referred to as Syllabary b or Vocabulary S^{b} contains three columns: in the middle are Sumerian word-signs, on the left their phonetic renderings, and on the right the Akkadian equivalents.

line 90 e-di-in : edin : *e-di-nu*
line 91 e-di-in : edin : *ṣē-e-ru*[27]

The philologist Friedrich Delitzsch had first claimed in 1881 that the Akkadian equivalent in line 90, *edinu*, was identical with the Hebrew *ʿēden.*[28] In 1898, Sayce drew upon Delitzsch’s reading. Eleven years after he had first published his Eden hypothesis, Sayce felt he could comfortably translate *kiškānû* as the ‘tree of life.’

> The cuneiform inscriptions have . . . cleared up the geography of the garden of Eden. The Sumerian name of the ‘plain’ of Babylonia was Edin, which was adopted by the Semites under the form of Edinu. Its Assyrian equivalent was *Zeru*, corresponding to the Arabic Zor, the name still applied to the ‘depression’ between the Tigris and Euphrates. . . . The seaport of primitive Chaldæa was Eridu, ‘the good city,’ now Abu-Shahrein, that stood near the mouth of the Euphrates. In its neighborhood was a garden, a ‘holy place,’ wherein grew the sacred palm-tree—the tree of life—whose roots of bright lapis lazuli were planted in the cosmic abyss, whose position marked the centre of the world, and whose foliage was the couch of the goddess Bahu, while the god Tammuz dwelt in the shrine under the shadow of its branches, within which no mortal had ever entered.[29]

Sayce continued to maintain that the *kiškānû* was the Biblical ‘tree of life’ up to 1909, though his means of arriving at this interpretation changed over time.[30]

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[27] For this list, see B. Landsberger, *Materialen zum sumerischen Lexikon (MSL)* 3, Rome, 1955, p. 104.

[28] F. Delitzsch, *Wo lag das Paradies? Eine biblisch-assyriologische Studie, Mit zahlreichen assyriologischen Beiträgen zur biblischen Länder- und Völkerkunde*, Leipzig, 1881, pp. 79–80, n. 41 (which appears on pp. 144–45). Although Hommel, 1882, p. 400, described the *kiškānû* passage as ‘eine Art südbabylonischer Paradiesessage,’ he also noted ‘die aber wohl kaum die Vorlage der semitischen (hebräischen und nordbabylonischen) gewesen ist.’

[29] Sayce, 1898, p. 643. Others connected edin and *edinu* with the Biblical Paradise; see, e.g., É. Dhorme, ‘L’arbre de vérité et l’arbre de vie,’ *Revue Biblique* 2 (1907), p. 274, ‘. . . nous avons vu que le paradis terrestre l’Éden, était situé à l’orient. A côté de l’arbre de la science du bien et du mal, on s’y représentait l’arbre de vie. Un fleuve sortait du jardin (Gen. II, 10) et son prototype est, peut-être, à rechercher dans le íd-edin “fleuve de l’*edinnu*,” qui se rencontre dans Gudea [Cylinder A] XXVII, 21.’

[30] In 1902, Sayce held that Eridu was to be identified with Eden and that the *kiškānû* lived in a paradisaical garden: see Sayce, 1902, p. 385, ‘That there is a connection between the Biblical story and [our *kiškānû* text] is, however, rendered certain by the geography of

A modern philologist may be aghast at Sayce's line of reasoning, but his interpretations were met with approval by the great majority of his contemporaries.[31] When Sayce first published this claim in 1887, George Smith's *Chaldaean Account of Genesis—Containing the Description of the Creation, the Fall of Man, the Deluge, the Tower of Babel, the Times of the Patriarchs, and Nimrud; Babylonian Fables and Legends of the Gods; from the Cuneiform Inscriptions* had been in circulation for eleven years. Smith's discovery of the deluge account, buried amongst broken cuneiform tablets in the British Museum, motivated him to seek Mesopotamian sources for other Biblical stories. Throughout his book, Smith systematically correlated his translations of cuneiform texts and interpretations of ancient Near

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the Biblical Paradise. It was a garden in the land of Eden, and Edin was the Sumerian name of the "plain" of Babylonia in which Eridu stood. Two of the rivers which watered [Eden] were the Tigris and Euphrates. The two streams, in fact, which we are specially told had been created and named by Ea at the beginning of time. Indeed, the name that is given to the Tigris in the Book of Genesis is its old Sumerian title, which survived in later days only in the religious texts. Even the strange statement that "a river went out of Eden," which "was parted and became into four heads" is explained by the cuneiform texts. The Persian Gulf was called "the Salt River," and, thanks to its tides, was regarded as the source of the four streams which flowed into it from their "heads" or springs in the north. On early Babylonian seals, Ea, the god of the sea, is depicted as pouring sometimes the four rivers, sometimes only the Tigris and Euphrates from a vase he holds in his hands.' See also pp. 260–61, 'Eden or "plain" of Babylonia was still a marsh . . . identified with Eridu'; and p. 263, '. . . it was at Eridu that the garden of the Babylonian Eden was placed; here was the "centre of the earth". . . .'

Sayce, 1902, p. 386, goes on, 'The sacred tree of the garden of Eridu [our *kiškānû*] was, however, not the tree of life. It was rather the tree of knowledge. . . . But Ea was not only the god of wisdom [i.e., 'knowledge'], he was also the god of "life," and the trees of both wisdom and life might therefore be fitly placed under his protection.' Here Sayce has shifted from the *kiškānû*—the 'tree of life'—to the *kiškānû*—the 'tree of knowledge of good and evil.' He ultimately identified both paradisaical trees with the *kiškānû*. In 1909, Sayce pursued this link between both paradisaical trees and the *kiškānû* by arguing that the 'tree of knowledge' (which Sayce argued here is the *kiškānû*) must be 'more original' than the 'tree of life,' and that the 'tree of knowledge,' being older, at some point divided into the 'tree of knowledge of good and evil' and the 'tree of life.' Sayce maintained that the *kiškānû* was a real tree, except that here he argued it was a cypress. See Sayce, 'The Trees of Life and Knowledge,' in *Florilegium, ou recueil de travaux d'érudition dédiés à Monsieur le Marquis Melchior de Vogüé à l'occasion du quatre-vingtième anniversaire de sa naissance, 18 octobre 1909*, Paris, 1909, pp. 543–50.

Sayce described the *kiškānû* as an 'oracle-tree,' in order to secure his interpretation of it as the 'tree of knowledge' (op. cit., p. 544, and passim). This idea that the *kiškānû* = oracle-tree had been previously proposed by Ball, 1899, p. 29. The idea that real trees served as oracles in Babylonian and Assyrian religion was taken up by later scholars, e.g., M. Jastrow, *Die Religion Babyloniens und Assyriens*, Bd. 2/1, Giessen, 1912, p. 202; S. Mowinckel, 'Wer war Gilgameš?' *Acta Orientalia* 15 (1937), p. 154; and H. Frankfort, *Cylinder Seals, A Documentary Essay on the Art and Religion of the Ancient Near East*, 1939, rep. ed., London, 1965, p. 135.

[31] See Sayce, 1887, p. 241; 1898, p. 643. Following Sayce concerning the *kiškānû* as the AST, see, e.g., Goblet d'Alviella, 1894, pp. 145–57; Ball, 1899, pp. 28–29; Jeremias, 1904, pp. 96–97, 99, and figs. 33–34; and Wünsche, 1905, pp. 1–2.

Eastern art with stories and images from the Old Testament. Smith based his understanding of cuneiform literature on the Bible; and in cases where a given Mesopotamian story correlated with a given Biblical story, but suffered from gaps in the existing texts, Smith proceeded to supply the meaning of the Mesopotamian story from the Bible.[32] This biblically oriented approach to the understanding of cuneiform texts had already been taken up by George Rawlinson's brother, Henry, whose contributions to the decipherment of cuneiform appeared in his translation of the trilingual Behistun inscription published between 1847 and 1851.[33] Henry Rawlinson had identified Eridu with a 'type of paradise,' and Chaldaea as the location for the Biblical Eden.[34] Spurred on by these findings, Sayce continued the work of those who had sought the origins of Genesis in Mesopotamian texts.

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[32] As an example, Smith interpreted some cuneiform tablets as equivalent to the Biblical Creation story, yet breaks in the tablets led Smith to conclude, 'Here it is difficult to say how far the narrative of the [cuneiform] inscription agrees with that of the Bible. In this case it is better to [first] review the Biblical account, which is complete, and [then] compare it with the fragmentary allusions in the inscriptions.' (Smith/Sayce, 1880, p. 87.)

[33] H. Rawlinson began copying the inscription of Darius I carved on the side of a mountain at Behistun in western Iran in 1835. The inscribed architectural ruins at Behistun served as the primary source for the initial copying and later deciphering of cuneiform. The fact that these inscriptions were written out in three different languages (later identified as Old Persian, Babylonian and Elamite), but the same script, allowed for comparative analysis and decipherment of each language over time. For Rawlinson's publication of the inscriptions, see H. C. Rawlinson, 'The Persian Cuneiform Inscription at Behistun, Decyphered and Translated; with a Memoir on Cuneiform Inscriptions [in general, and on that of Behistun in particular],' *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 1st ser., vol. 10, 1847, [pt. I: 'Memoir'] pp. 1–349; [pt. II: 'Memoir'] pp. 1–192; [pt. III: copies of inscription, transcription and translation of the Behistun text] pp. i–lxxi. See also H. Rawlinson, 'Analysis of the Babylonian Text at Behistun,' ibid., vol. 14, 1851, pp. i–civ; and 'Memoir on the Babylonian and Assyrian Inscriptions' [including copies of the Babylonian inscription, transcription and translation of the Behistun text], ibid., vol. 14, 1851, pp. 1–16.

H. Rawlinson was one of a group of cuneiform scholars who contributed to the decipherment of the cuneiform script. In 1857, as a part of this process of decipherment, a handful of Assyriologists participated in a contest in which each contestant was given the same text and required to arrive at his translations independently. For the participants and their results, see H. Rawlinson, W. H. Fox Talbot, J. Oppert and E. Hincks, *Inscriptions of Tiglath Pileser I., King of Assyria, B.C. 1150*, London, 1857. For a condensed survey of those involved in the successive stages of deciphering cuneiform, and for the significant but historically undervalued role of E. Hincks in the decipherment process, see C. B. F. Walker, 'Cuneiform, Pt. 5: Decipherment,' in *Reading the Past, Ancient Writing from Cuneiform to the Alphabet*, Berkeley and Los Angeles, 1990, pp. 58–62.

For a description of the first stages of copying cuneiform inscriptions, particularly the copying of the Persepolis inscriptions by C. Niebuhr in 1765, 'who is generally seen as having created the very foundations for the attempts at interpretations and decipherment in the decades following his *Reisebeschreibung nach Arabien und andern umliegenden Ländern*, vol. 2, Copenhagen, 1778,' see M. Harbsmeier, 'Before Decipherment: Persepolitan Hypotheses in the Late Eighteenth Century,' in Gunter, 1992, pp. 23–59 (quotation from p. 29). Of particular interest to our discussion is Niebuhr's role in the very beginnings of cuneiform decipherment in the West: Niebuhr was part of a scientific expedition charged with the task of travelling to the Middle East to acquire answers to questions mainly formulated by J. D. Michaelis, professor of Oriental Languages in Göttingen. The form and content of Michaelis' questions were those of an Old Testament scholar; Harbsmeier notes that this must have influenced Niebuhr (op. cit., pp. 29–35, esp. p. 34).

The question of whether the *kiškānû* should or should not be identified with the 'tree of life,' and indeed what the word should be taken to mean, has a long and complex history that continues to the present day,[35] but after the early years of the twentieth century the AST fell out of the debate to a great extent.[36] The main reason for this was not that Sayce's argument was convincingly refuted in print but that the alternative date palm theory emerged and won many influential adherents. The success of the date palm theory occurred as scholars turned away from the biblically oriented approach that had previously structured their inquiries.

The 'tree of life' and *kiškānû* interpretations of the AST slumbered gently for almost a century, until they were awakened by Simo Parpola, who published an article in 1993 that surprised many of his colleagues.[37] Parpola's main object of discussion is the AST seen in our fig. **1**, which he defined as the model for the Sefirotic Tree of Life (also known as the Tree of Knowledge) of Jewish Kabbalah. He based this identification on what he took to be certain physical resemblances between the two trees, and certain conceptual resemblances, which could not, in his view, have been coincidental. Working backwards from what is known about the Sefirotic Tree from medieval mystical writings and mapping that information onto the AST, Parpola argued that these related 'trees' represent a mystical diagram that symbolized divine world order, an image of god and an image of the ideal man.[38]

Parpola's thinking about all this, and about the role of the AST in it, is quite textured and not always easy to follow. However, a close reading of his footnotes shows that he connected the *kiškānû* appearing in *CT* 16, 46 ultimately with the AST, and both with the Sefirotic Tree of Life.[39] Parpola's ideas have met with opposition in the field;[40] nevertheless, they have also successfully entered the footnotes of mainstream scholarship on the AST.[41] It could be that this kind of tacit acceptance by his colleagues has engendered an acceptance outside the field: in 2002, a botanist used Parpola's 1993 article as the basis for his argument that the AST represents the 'tree of life,' which he identified as the *kiškānû* from *CT* 16, 46.[42] Parpola reawakened an old idea about the AST of which scholars in the field now have little knowledge. Whether this will lead to a large-scale revival of *kiškānû* and 'tree of life' theorizing remains to be seen.

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[34] Smith/Sayce, 1880, p. 88, '. . . from the general body of Assyrian texts, Sir Henry Rawlinson has pointed out the agreement of the Babylonian region of Karduniyas or Ganduniyas with the Eden of the Bible.' And Pinches, 1902, p. 71, 'Eridu [a city] which Sir Henry Rawlinson recognized many years ago as a type of paradise. . . .' See also Lenormant, t. 2/1, 1882, pp. 106–10, for a synopsis of Rawlinson's theory of a Chaldaean Eden.

[35] For a discussion, see my 'Interpretations of the "Assyrian Sacred Tree," 1894–2004,' Ph.D. diss., University of Michigan, Ann Arbor, 2004, pp. 15–52. Scholars in the field are still deciding what kind of tree is meant by '*kiškānû*.' For those who have have followed the history of the discussion, it is clear this is an arduous process, not unlike the process of deciding what the AST represents.

[36] Exceptionally, however, see U. Magen, *Assyrische Königsdarstellungen—Aspekte der Herrschaft, eine Typologie, Baghdader Forschungen* 9, Mainz, 1986, p. 80 and n. 70, who thought we should keep open the possibility that the AST seen in figs. **1–2** represents the *kiškānû*.

[37] Parpola, 1993.

[38] The idea that the AST represents the king as the 'Perfect Man' (Parpola, 1993, p. 168), seems to me connected to a diagram published by Walter Andrae in his *Die Ionische Säule, Bauform oder Symbol? Studien zur Bauforschung* 5, Berlin, 1933, p. 51, where Andrae argued that the AST represented 'humankind' (see n. 396 below).

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[39] See Parpola, 1993, p. 194, n. 128, where Parpola discussed the relation between the lapis lazuli trees of Gilgameš IX, the *kiškānû* of *CT* 16, 46, and the AST (which for him represents the 'Tree diagram').

[40] For a concise critique of Parpola's theories, especially those concerning the AST, see J. Cooper, 'Assyrian Prophecies, the Assyrian Tree, and the Mesopotamian Origins of Jewish Monotheism, Greek Philosophy, Christian Theology, Gnosticism, and Much More,' *Journal of the American Oriental Society* 120 (2000), pp. 430–44. See also B. Porter, 'The Meaning of the Assyrian Tree Image: Iconographic Evidence,' in B. Porter, *Trees, Kings and Politics: Studies in Assyrian Iconography*, *Orbis Biblicus et Orientalis* 197, Fribourg and Göttingen, 2003, pp. 21–29.

[41] While those opposed to Parpola's theories regard his views as 'eccentric,' it should be noted that a number of scholarly publications cite his 1993 article as part of the accepted repertoire of scholarly interpretations of the AST. See, for example, P. Albenda, 'Assyrian Sacred Trees in the Brooklyn Museum,' *Iraq* 56 (1994), p. 123 and n. 8; J. Curtis and J. Reade, eds., *Art and Empire, Treasures from Assyria in the British Museum*, London, 1995, p. 59 (cat. no. 9); P. O. Harper, 'Taq-I Bostan and Mesopotamian Palatial Traditions,' in H. Gasche and B. Hrouda, eds., *Collectanea Orientalia: histoire, arts de l'espace et industrie de la terre, Études offertes en hommage à Agnès Spycket, Civilisations du Proche-Orient,* Série 1, *Archéologie et Environnement* 3, Neuchâtel, 1996, p. 124 and n. 18; Russell, 1998, pp. 687–89 and n. 89 (but on p. 687 Russell referred to Parpola's ideas as 'controversial'); J. G. Westenholz, ed., *Sacred Bounty, Sacred Land, The Seven Species of the Land of Israel,* Jerusalem, 1998, pp. 53–55; E. Ehrenberg, *Uruk, Late Babylonian Seal Impressions on Eanna-Tablets, Ausgrabungen in Uruk-Warka Endberichte* 18, Mainz, 1999, p. 27 and n. 114; J. M. Russell, 'Neuassyrische Kunstperiode, III, Reliefs,' *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 9 (1998–2001), p. 246; D. Collon, *Catalogue of the Western Asiatic Seals in the British Museum: Cylinder Seals* 5, *Neo-Assyrian and Neo-Babylonian Periods,* London, 2001, p. 82; M. Roaf and A. Zgoll, 'Assyrian Astroglyphs: Lord Aberdeen's Black Stone and the Prisms of Esarhaddon,' *Zeitschrift für Assyriologie* 91 (2001), pp. 274, 275 and n. 32, p. 276 and n. 35, p. 286 and n. 58; and N. Kourou, 'The Sacred Tree in Greek Art. Mycenaean versus Near Eastern Traditions,' in S. Ribichini, M. Rocchi, P. Xella, eds., *La questione delle influenze vicino-orientali sulla religione greca, Stato degli studi e prospettive della ricerca, Atti del colloquio internazionale (Roma, 20–22 maggio 1999), Monografie scientifiche, serie scienze umane e sociali,* Roma, 2001, pp. 31–32 and n. 5, p. 33 and n. 8.

[42] See J. Andrew McDonald, 'Botanical Determination of the Middle Eastern Tree of Life,' *Economic Botany* 56 (2002), pp. 113–29 (see pp. 126–27 for the *kiškānû* identification). However, McDonald does not link his *kiškānû* identification in any way to Parpola, 1993.

2 *Ashêrah* and May-pole

In 1849, Layard gave us the first analytical term for discussing the AST seen in fig. **2** when he described the crowning element as a honeysuckle.

> We have, moreover, in the earliest monuments of Nineveh, that graceful ornament, commonly called the honeysuckle, which was so extensively used in Greece, and to this day more generally employed than any other moulding. . . . [T]he simple flower [honeysuckle] becomes a tree, bearing many flowers of the same shape.[43]

George Rawlinson used Layard's term in his own description of the AST as a 'pillar':

> The simplest [example] consists of a short pillar springing from a single pair of rams' horns, and surmounted by a capital composed of two pairs of rams' horns separated by one, two, or three horizontal bands; above which there is, first, a scroll resembling that which commonly surmounts the winged circle, and then a flower, very much like the 'honeysuckle ornament' of the Greeks.[44]

As a footnote to this, Rawlinson attributed the honeysuckle description to Layard and chose (instead) to understand the topmost element of the AST as the head of a palm:

> This resemblance which Mr. Layard notes (*Nineveh and its Remains*, vol. 2, p. 294) is certainly very curious; but it does not tell us anything of the origin or meaning of the symbol. The Greeks probably adopted the ornament as elegant, without caring to understand it. I suspect the so-called 'flower' was in reality a representation of the head of a palm-tree, with the form of which, as portrayed on the earliest sculptures (Layard, *Monuments*, pl. 53), it nearly agrees.[45]

Although Rawlinson found the source of the AST's crowning element in the palm, he did not interpret the AST as a conventionalized representation of the date palm. Instead, he interpreted it along the lines of the *ashêrah* of the Phoenicians referred to in the Old Testament, understood by him to be a wooden cult object.

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[43] Layard, vol. 2, 1849, pp. 294, 296.

[44] G. Rawlinson, vol. 2, 1864, p. 236. These observations are repeated in Rawlinson's *The Seven Great Monarchies of the Eastern World; or, the history, geography and antiquities of Chaldæa, Assyria, Babylon, Medea, Persia, Parthia, and Sassanian or New Persian Empire*, vol. 1, New York, 1885, p. 344.

[45] G. Rawlinson, vol. 2, 1864, p. 236, n. 1. See also Rawlinson, vol. 1, 1885, p. 563, n. 27.

> It is a subject of curious speculation, whether this sacred tree does not stand connected with the *Ashêrah* of the Phoenicians, which was certainly not a 'grove,' in the sense in which we commonly understand that word. The *Ashêrah*, which the Jews adopted from the idolatrous nations with whom they came into contact, was an artificial structure, originally of wood, but in the later times probably of metal, capable of being 'set' in the temple at Jerusalem by one king, and 'brought out' by another. It was a structure for which 'hangings' could be made, to cover and protect it, while at the same time it was so far like a tree that it could be properly said to be 'cut down,' rather than 'broken' or otherwise demolished. The name itself seems to imply something which stood straight up; and the conjecture is reasonable that its essential element was the 'straight stem of a tree.'. . . We have no distinct evidence that the Assyrian sacred tree was a real tangible object: it may have been, as Mr. Layard supposes, a mere type. But it is perhaps on the whole more likely to have been an actual object; in which case we cannot but suspect that it stood in the Assyrian system in much the same position as the *Ashêrah* in the Phoenician, being closely connected with the worship of the supreme god, and having certainly a symbolic character, though of what exact kind it may not be easy to determine.[46]

Despite the fact that Rawlinson saw the palm as the source for the 'flowers' adorning the AST in fig. **2**, he did not see the AST as an abstraction of a particular tree. Instead, he thought that it could have been a cult object constructed of treelike elements. The idea that images of the AST represent a constructed cult object had been in circulation from the beginning of discussions concerning the meaning of the AST. Prior to Rawlinson, Layard had wondered about a possible connection between the 'pomegranate-type' AST (e.g., fig. **15**) and the pillars described in Solomon's temple as decorated with a 'net-work of pomegranates' (1 Kings 7.15–22; 41–42).[47] Layard's contemporary, the architectural historian James Fergusson, had described the AST as

> in reality not a tree at all, nor even meant . . . to represent one, but . . . the emblem of some deity, or, at all events, an object of worship, but certainly not a mere vegetable production as had hitherto been supposed.[48]

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[46] G. Rawlinson, vol. 2, 1864, pp. 236–38. See also Rawlinson, vol. 2, 1871, pp. 8–9; and idem, vol. 1, 1885, p. 345.

[47] Layard, vol. 2, 1849: 296, note.

[48] J. Fergusson, *The Palaces of Nineveh and Persepolis Restored. An Essay on ancient Assyrian and Persian Architecture*, London, 1851, p. 294.

Fergusson identified the AST as the *ashêrah*, 'the object so frequently mentioned in the Bible as the Grove or Groves which the Israelites are so frequently accused of worshipping.'[49] Fergusson thought the 'Groves' referred not to a group of trees but to 'just such an emblem or idol as this [i.e., the AST].'[50]

François Lenormant also maintained that the AST did not represent an actual tree ('le plus souvent la plante sacrée prend un aspect conventionnel et décoratif, qui ne répond exactement à aucun type de la nature'),[51] but rather a kind of 'May-pole.'

> Mannhardt (*Wald und Feldkulte*, vol. 2, p. 262) remarque avec raison que le plus souvent la répresentation semble copiée sur une sorte de *Mai*, composé artificiellement avec des parties prises à des végétaux divers, et lié de bandelettes.[52]

Lenormant explained Mannhardt's Maypole hypothesis and included his own analysis of one of the ASTs seen in fig. **3**, now referred to as '(Esarhaddon's) Black Stone.'

> L'image de l'arbre de vie [AST], les simulacres que l'on semble en avoir faits à la façon des *Mais* de nos vieux usages de l'Europe occidentale, et des arbres chargés de toute espèce d'attributs et d'ornements que l'on apportait chaque année au printemps, comme symboles de vie, pour les brûler dans le cour du temple de (Atergatis), à Hiéropolis de Syrie—l'image de l'arbre de vie était chez les Chaldéo-Assyriens l'objet d'un véritable culte divin. Dans les représentations du monument connu sous le nom de 'la Pierre noire de Lord Aberdeen,' et qui se rapporte aux fondations religieuses du roi (Asarhaddon), à Babylone, nous voyons ce simulacre placé, à l'état d'idole, dans un naos que surmonte une cidaris ou tiare droite, garnie de plusiers paires de cornes. On l'avait donc identifié à une divinité.[53]

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[49] Ibid., p. 301.

[50] Ibid. See pp. 301–3, where Fergusson enumerated all the Old Testament passages where the word '*ashêrah*' occurs. I have not yet fully researched the possible relation between the AST and *ashêrah*, but I believe it is an avenue worth pursuing.

[51] Lenormant, t. 1, 1880, p. 78.

[52] Ibid., p. 78, n. 2. See W. Mannhardt, *Wald- und Feldkulte*, Bd. 2, Berlin, (1874) 1905, p. 262, n. 3, 'Er escheint als ein schlanker, von Knoten unterbrochener Stamm mit einer Krone gleich einem siebenfächerigen Palmblatt; er ist jedesmal rings umgeben mit einem Geschmeide von ähnlichen Blättern oder Blüten, die unter sich und mit dem Stamm durch ein Netz von Bändern verbunden sind, welche auch den Baumschaft selbst, wie die gemalten oder geschälten Ringe unsern Maibaum in spiralförmigen Windungen umwinden.'

[53] Lenormant, t. 1, 1880, pp. 87–88. Lenormant also identified the AST with the *ashêrah*: see t. 1, 1880, pp. 89–90. The Black Stone was originally referred to as 'Lord Aberdeen's Black Stone' since he presented it to the British Museum in 1860. See now I. Finkel and J. Reade, 'Assyrian Hieroglyphs,' *Zeitschrift für Assyriologie* 86 (1996), p. 254, who believe that Babylon must have been the provenance for the stone.

Russian émigrée and ancient historian Zénaïde Ragozin reiterated this view that the AST is a type of May-pole construction:

> It is probable that such artificial trees, made up of boughs—perhaps of the palm and cypress—tied together and intertwined with ribbons (something like our Maypoles of old), were set up in the temples as reminders of the sacred symbol, and thus gave rise to the fixed type which remains invariable both in such Babylonian works of art as we possess and on the Assyrian sculptures. . . .[54]

And the Viennese art historian Alois Riegl, whose analysis of the history of decorative floral motifs appeared in 1893, also held the view that the AST was a constructed object, built using methods and materials known from representations and actual remains of Aššurnasirpal II's throne. He had the following observations about the AST seen in fig. 2:

> The alleged sacred tree of the Assyrians [as exemplified in Aššurnasirpal II's palace] . . . does not deserve to be called a tree at all. It looks more like a piece of furniture fitted together from various components which include two rectangular shafts connected by sheaths like those on Assyrian furniture. . . . The interlacing wreath of palmettes surrounding the shaft no more resembles tree foliage than the shaft itself does a tree trunk, for the palmettes are linked in a series by flattened arcuated bands running all around the tree. The palmettes, except for the uppermost ones, are also connected by bands to the trunk. Sometimes pine cones occur in place of the palmettes. They are, however, linked only to the trunk and not to one another. This would seem to be a more treelike arrangement were it not for the fact that the trunk still has the sheaths reminiscent of furniture joints.[55]

Layard and Ragozin had described the AST as a 'sacred symbol,'[56] Fergusson had described it as 'an emblem of some deity,' and Lenormant had described it as a 'divinity.' Rawlinson had described the AST as 'symbolic in character.' His definition of an emblem or symbol is helpful in this context. When referring to various undecipherable figures found on Babylonian cylinder seals, Rawlinson wrote,

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[54] Z. Ragozin, *Chaldea from the Earliest Times to the Rise of Assyria (Treated as a General Introduction to the Study of Ancient History)*, London, 1886, p. 268. In the context of these early pole descriptions of the AST, it is relevant to consider the remarks of the Sinologist A. E. Terrien de Lacouperie, who identified the AST as the *kiškānû* and described it as a pole: '. . . the *kiškānû* cannot be a tree, and the composition of the expression by which it is called shows itself not to have been framed in view of designating a real tree. . . . [T]he *kiškānû* was most probably a central pole (like that of a tent, for a tent-inhabiting population), whence it was taken to be the main-staff, and in mythology the central pillar (of the world). . . . No possible doubt can remain that the *kiškānû* is not the tree of life that figured on so many monuments of Babylonia and Assyria [e.g., on the walls of Aššurnasirpal's palace]. It is the world-tree, the pillar of the world, the great shaft which unites heaven and earth in the mythological conceptions of more than one of the nations of old.' For this, see Terrien de Lacouperie, 1890, p. 221.

[55] A. Riegl, *Problems of Style, Foundations for a History of Ornament*, Stilfragen, 1893, trans. E. Kain, Princeton, 1992, pp. 94–95.

[56] Layard, vol. 2, 1849, p. 296, 'This tree, evidently a sacred symbol . . .'

> A study of the inscribed cylinders shows that these emblems have no reference to the god or goddess named in the inscription upon them. Each [figure] apparently, represents a distinct deity; and the object of placing them upon a cylinder is to imply the devotion of the man whose seal it is, to other deities besides those whose special servant he considers himself. A single cylinder sometimes contains as many as eight or ten such emblems.[57]

The constructed cult object theory seeks to demonstrate that the AST is a discrete symbol representing a divinity in aniconic form, much as other Mesopotamian symbols represent other deities in aniconic form.[58] Above we noted that Rawlinson wrote the AST 'is perhaps on the whole more likely to have been an actual object.' In his footnote to that comment he elaborated: 'It [the AST] is found with objects which are all certainly material, as on Lord Aberdeen's [Esarhaddon's] Black Stone, where a real sacrificial scene appears to be represented.'[59] Fergusson, Rawlinson and Lenormant were helped to their conclusion that the AST is a cult object via Esarhaddon's Black Stone (fig. 3), where the AST appears together with seven other discrete figures (or 'symbols') 'which are all certainly material.' Fergusson, convinced that each figure on the Black Stone was a discrete emblem, specifically compared the date palm and two ASTs carved there:

> In the lower [register is] represented . . . a date-palm, so faithfully drawn as to show that it was not for want of power to represent natural objects that the trees seen in the upper [register] were so conventional in form.[60]

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[57] G. Rawlinson, *The Five Great Monarchies of the Ancient Eastern World; or, The History, Geography, and Antiquities of Chaldea, Assyria, Babylon, Media, and Persia, collected and illustrated from Ancient and Modern Sources*, vol. 3, London, 1865, p. 467. See also Rawlinson, *The Seven Great Monarchies of the Eastern World; or, the history, geography and antiquities of Chaldæa, Assyria, Babylon, Medea, Persia, Parthia, and Sassanian or New Persian Empire*, vol. 2, New York, 1885, p. 229.

[58] Such as Marduk and Nabû, who are often represented by the spade and cuneiform wedge symbols, respectively.

[59] G. Rawlinson, vol. 2, 1864, p. 237, n. 12. See also Rawlinson, vol. 1, 1885. p. 563, n. 38.

[60] Fergusson, 1851, pp. 299–300.

3 The date palm

At the same time that some scholars were describing the AST as a representation of an actual object, others were describing it as a representation of an actual tree. In 1888 Emanuel Bonavia, physician and botanist working in India (specializing in dates palms), published a description of the AST in which he characterized it as an abstracted form of a date palm.[61] He drew attention in particular to the AST's trunk decorated with chevrons (see fig. **2**).

> The central portion or stem of this is, I think, unmistakably intended for the date tree. . . . Its stem is ornamented with regular projections, directed upwards. These can hardly be meant for any other than the triangular bases of the leaves, which are directed upwards and, in young trees, remain a long time attached to the stem after the leaves have decayed, or have been cut away for various purposes. When the tree becomes old, the bases of the lower leaves drop off, leaving only transverse scars in the places of attachment.[62]

Bonavia's claim of formal similarity does not address why some ASTs lack chevrons on their trunks and, further, why the chevron pattern also appears on some palm fronds crowning the AST (see again fig. **2**). Neither does it address why a chevron pattern would have been chosen over the diamond pattern to represent date palm imbrications on the AST, since representations of actual date palm trunks, published prior to Bonavia's article (e.g., on the Black Stone, fig. **3**), show a preference for the diamond pattern.

Bonavia's claim of formal similarity was motivated by his belief that the AST represents an actual tree. He catalogued six different types of ASTs appearing on wall reliefs and cylinder seals, believing each had originated in an actual species (i.e., date palm, vine, pomegranate, conifer ['fir'], oak, and 'unknown'). Of these, he observed that the date palm was the most commonly represented and was the basic type seen on Aššurnasirpal II's wall reliefs.[63] Bonavia combined a claim of formal similarity with a further claim, one of social significance, to argue for a date palm identification.

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[61] Bonavia is known in part for introducing different varieties of dates from the Near East into northern India and Pakistan in 1869. See, e.g., E. Bonavia, *The Future of the Date Palm in India,* Calcutta, 1885. Paul Popenoe, another well-known botanist responsible for introducing the date palm into America, described Bonavia as 'the pioneer authority on date culture in India.' See P. Popenoe, *Date Growing in the Old World and New,* Altadena, CA, 1913, p. 53.

[62] E. Bonavia, 'Sacred Trees of the Assyrian Monuments,' *The Babylonian and Oriental Record* 3/1 (1888), p. 7. Prior to Bonavia, others had described the AST as a stylized representation of an actual tree (e.g., see W. Baudissin, *Studien zur Semitischen Religionsgeschichte*, Heft 2, Leipzig, 1878, pp. 189–92, esp. 190, n. 1, for those scholars prior to Baudissin who had identified the AST as an actual tree). With Bonavia we have the first sustained argument as to why the AST must represent an actual tree.

> In Assyrian times such a valuable tree, represented the main food of the people . . . and a tree so essential to the existence of the people, and so much 'in evidence' everywhere, would sooner or later be symbolized by religious thinkers into a sacred tree, and artists would soon have made a conventional and ornamental thing of it, to suit the decoration of flat surfaces in palaces and temples, the needs of embroidery, etc.[64]

In other words, because we think that the date palm was important to society, it must have been elevated in ancient times to the realm of symbolic status and then translated into a symbol of a sacred tree. Further, according to Bonavia, since Neo-Assyrian images were visually conceived of to decorate flat surfaces (i.e., walls, garments, etc.), this meant that their form was rendered in a schematic, stylized or conventionalized manner. Bonavia's claim of formal similarity, and his use of the phrase 'conventionalized representation' to describe the AST as an abstract representation of an actual tree, convey his own deeper assessment of the aesthetic success of Neo-Assyrian art:

> In studying the origins of these sacred trees, one should not leave out of consideration that they are represented in a rude manner, mostly on flat stone surfaces. If we add to this the fancy of the artist in producing a picture, pretty to look at and suited to the place in which it was to be shown, the conventionality of these sacred trees will be sufficiently accounted for, the object of the artist being rather to suggest an *idea*, than to give an accurate delineation of the *thing*. The conventionality of these trees should be looked upon in much the same light as the conventional mode of delineating flowers and other objects, which designers of carpets, curtains, wall-papers, etc., make use of in the present day; only the decorative art of those days was in its infancy.[65]

There are examples of objects that combine an image of an AST (for Bonavia, the '*idea*' of a date palm) with an image of a naturally rendered date palm (for Bonavia, the real '*thing*'), for example fig. **3**. Bonavia could well have seen (an image of) Esarhaddon's Black Stone since it was reproduced and discussed in the literature by Fergusson in 1851. He would have identified three date palms on the stone: two in the abstract form of ASTs on the top register and one in the natural form of a date palm on the bottom register. In analyzing these representations ourselves, we are tempted to ask why abstract and veristic versions of a date palm would appear together in the same context? We know that artists of this period presented anthropomorphic and aniconic versions of the same deity—in different compositions; but the presentation of abstract and veristic versions of the same tree—in the same composition—is rather different.[66] Are there comparable examples in Mesopotamian art, of a symbol that can be described as rendered in both abstract and veristic versions, and where both versions appear together in the same context? If we cannot locate comparable examples, and yet still maintain that the AST is a conventionalized representation of a date palm, we should then ask what it is that makes the AST exceptional.

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[63] Ibid., pp. 7–9, and fig. 1.

[64] Ibid., p. 9.

[65] E. Bonavia, *The Flora of Assyrian Monuments and Its Outcomes*, Westminster, 1894, p. 44 (emphasis his). Contrast Bonavia's opinion with Fergusson's quoted above (in the body of our text, at the end of chapter 2).

For Bonavia, a claim of social significance also held much weight: he believed it was the utility of the date palm, its many-faceted uses, that elevated it to the status of a sacred tree, worthy of worship by the Assyrians:

> The tree which seems to have been most revered in Assyrian times was the date-palm; and one can fancy the importance of such a tree in those regions. . . . It would appear to me that there can be no question that its great usefulness, in many ways, was the first cause of its adoration.[67]

In raising the tree to this kind of cult status, Bonavia was combining a claim of social significance with a claim of Biblical parallels:

> To one who has studied the importance of the date tree to Orientals now, and the position it must have held in Chaldæan times, it is no wonder that it should be styled the 'tree of life.'[68]

Sayce shared Bonavia's identification of the AST as a date palm, based on claims of social significance and Biblical parallels. In addition to describing the AST as the Biblical 'tree of life,' Sayce interpreted the winged genies as cherubs, furthering the claim of Biblical parallels. Sayce also reasoned that the AST must have been at least part date palm due to the social significance of the palm:

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[66] For a Neo-Assyrian dated example of a composition showing an anthropomorphic version of, e.g., the moon god Sîn, see, e.g., ANE 89780, a cylinder seal with Sîn being worshipped in human form (for this see Collon, 2001, pl. XVIII, 229, and text pp. 120–21); for a similarly dated aniconic version of the same deity, see, e.g., ANE 140368, a cylinder seal with Sîn being worshipped as a moon crescent mounted on a standard (for this see Collon, 2001, pl. XVIII, 221, and text p. 119).

[67] Bonavia, 1894, pp. 45, 48. See also Bonavia, 'Sacred Trees of the Assyrian Monuments,' *The Babylonian and Oriental Record* 3/3 (1889), p. 59, 'In all these trees there appears to have been some motive of great *usefulness* for raising them to the rank of sacred tree, variations in the mode of representing them occasionally occurring to the fancy of the artist.' And, pp. 59–60, 'There can hardly be much doubt that the priests and philosophers of those days would have soon woven round these useful trees superstitions and myths to show off their own wisdom and importance; but nevertheless I believe their *great usefulness* to have been the original reason for raising them to the rank of sacred tree, as divine gifts provided by the Gods for their people' (emphasis his).

[68] Bonavia, 1894, p. 47.

> The palm was from the earliest period characteristic of Babylonia; and while its fruit seemed to be the stay and support of life, the wine made from it made 'glad the heart of man.' Date-wine was largely used, not only in Babylonian medicine, but in the religious and magical ceremonies of Babylonia as well.[69]

These claims could not stand on their own as plausible arguments for a date palm identification of the AST. Rather it was the synthesis of the claim of formal similarity, based on visual material, with claims of social significance and Biblical parallels, based on textual material, that provided the means for concluding the AST is a date palm.

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[69] Sayce, 1887, p. 242.

4 Fertilization

In 1890 Edward Tylor, the celebrated author of *Primitive Culture*[70] and probably the most famous anthropologist in the world at that time, made a contribution to the date palm debate. He identified the AST as representing a group or grove of date palms.[71] Tylor synthesized and elaborated on the claims that had been circulating in the scholarly discourse; and he was the first to formulate the fertilization theory, which depends heavily upon all these claims for support. As we shall see, his article has had the greatest influence of any contribution to the study of the AST. One wonders what would have happened if so commanding a figure had argued for a different theory.

To begin with, Tylor reiterated the claim that a formal similarity existed between the AST and date palms. He expressed this by referring to the design of the AST as a 'conventional' representation of an actual date palm grove,

> I insert here a copy of the representation of the head of a date-palm in [the] Assyrian landscape, scarcely less conventionalized than in the 'sacred tree,' which may probably stand for a group or grove of trees. . . . The Assyrian drawing of plants is . . . rough and conventional. . . . The conventional outlines and combinations of the various parts of the palm-tree, though difficult to follow, especially when they have passed into ornament, often seem to show that the artist has the sense of their meaning.[72]

These observations reflect Bonavia's opinion that the artist's intention to depict a date palm was clear enough, even if the execution was not technically very sophisticated.[73]

Tylor used Rawlinson's description of the 'flowers' adorning the AST to support the claim of formal similarity:

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[70] E. B. Tylor, *Primitive Culture: Researches into the Development of Mythology, Philosophy, Religion, Language, Art and Custom*, 1st ed., London, 1865.

[71] E. B. Tylor, 'The Winged Figures of the Assyrian and Other Ancient Monuments,' *Proceedings of the Society of Biblical Archaeology* 12 (June 1890), pp. 383–93. He first published these ideas in two separate journals as 'The fertilisation of date palms,' *The Academy* (8 June 1889), p. 396; and *Nature* (23 January 1890), p. 283. Hereafter all references to Tylor's fertilization theory are taken from his *Proceedings of the Society of Biblical Archaeology* (1890) article.

[72] Tylor, 1890, pp. 384–85, 388.

[73] Tylor never referred to Bonavia's work in his article, yet it seems probable that he would have been aware of Bonavia's views as he wrote.

> That these tree-figures [ASTs] represent date-palms is now recognized. An early remark to this effect is by Prof. G. Rawlinson: 'I suspect the so-called "flower" was in reality a representation of the head of a palm-tree, with the form of which, as portrayed on the earliest sculptures (Layard, *Monuments*, pl. 53), it nearly agrees.'[74]

Tylor's use of Rawlinson's remarks is revealing, since we know that in fact Rawlinson supported a cult object explanation for the AST, even while describing parts of the AST as being similar to a date palm.

The fact that Tylor introduced the claim of formal similarity prior to the fertilization theory was important for the success of the fertilization theory. By setting up an analogy between the AST and a date palm based on the imagery, he then set up an analogy between the two based on texts. We will see that the claim of formal similarity was greatly bolstered by the textual explanation of artificial fertilization: the iconographical theory (i.e., 'fertilization') was used to determine and support the pre-iconographical description of the AST as a 'date palm.'

Winged genies pointing conelike objects at the AST motivated Tylor to look for the deeper, 'original' meaning behind this activity. He assumed that the activity must have a rational explanation that went beyond our interpretation of it as a mystical ceremony:

> . . . it is always desirable to look for evidence of that intelligible meaning which underlies religion as it does other institutions. It occurred to me that it [the genies' activity] might be connected with artificial fertilization of the date-palm, which has been remarked on by naturalists since antiquity.[75]

Tylor proposed that the conelike object gripped by the genies represented a flowering male inflorescence of the date palm, which the genies used to sprinkle pollen onto the conventionally rendered female date palm groves (represented as the AST seen in, e.g., fig. **2**).[76] The buckets they held in the other hand provided for safekeeping of and easy access to the male inflorescences. To prove this interpretation of the imagery, he turned to ancient classical texts. First, Tylor quoted from three sources that discuss date palm pollination: Herodotus, *Histories*, 1.193; Theophrastus, *Historia Plantarum*, 2.8.4; and Pliny, *Natural History*, 13.7.34–35.

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[74] Ibid., p. 384.

[75] Ibid., p. 385. For more on Tylor's interpretive approach to ritual activity, see, e.g., S. E. Hyman, 'The Ritual View of Myth and the Mythic,' in T. A. Sebeok, ed., *Myth. A Symposium*, 1955, 3rd printing, Bloomington and London, 1970, pp. 136–37, 'Tylor's general principle, almost his law, is that survivals are significant because they embody, sometimes in trivial or playful form, the serious usages of earlier stages. In material culture, it meant that such important tools as the bow and arrow, the fire drill, and the magician's rattle evolved into the toys of children; in non-material culture, it meant that myths were based on rites, although, like many rationalists before him, Tylor believed that they had been consciously devised as explanations.'

[76] Tylor put forward his fertilization theory knowing that date palms are dioecious, that is, that their trees are separately sexed, so that male and female flowers appear on separate trees.

> Herodotus, describing the Babylonian region, writes: 'Palm-trees grow in great numbers over the whole of the flat country, mostly of the kind which bears fruit, and this fruit supplies them with bread, wine, and honey. They are cultivated like the fig-tree in all respects; among others, in this. The natives tie the fruit of the male-palms, as they are called by the Greeks, to the branches of the date-bearing palm, to let the gall-fly enter the dates and ripen them, and to prevent the fruit from falling off. The male-palms, like the wild fig-trees, have usually the gall-fly in their midst.'[77]
>
> The next account is by Theophrastus, who mentions the difference between the male and female flowers in a passage of great interest to botanists as distinguishing plant-sex. Further on, after describing the caprification of the fig he continues: 'In the palms these (aids are given) by the males to the females. For they cause staying on and ripening. [. . .] It takes place in this way. When the male blossoms they cut away the spathe on which is the inflorescence forthwith as it is, and shake down the bloom and flower and pollen upon the fruit of the female. And when thus treated, it keeps on and does not fall away.'[78]
>
> Pliny follows in his *Natural History*, remarking on the sexes of the date-palm, and adds that the fecundation is even contrived by man, from the males by the flower and down, sometimes even only by the dust being sprinkled on the females.[79]

Tylor added that natural pollination, that is, wind carrying pollen to the female flowers, took place as well, though he questioned its reliability:

> It has been stated in the 17th century that the groves of wild palms in the deserts of Africa without any cultivation produced good and plentiful crops of dates, the wind conveying the pollen from the male to the female palms. Whether anything of the kind has been observed of late years I have no information, but it is obvious that the produce of such natural fertilization, depending on the number and position of the male palms, must at best be scanty and irregular. It is not to be wondered at that artificial methods have come to prevail generally where the culture of the date is carried on. These methods are seen from the foregoing passages to be three in number. That described by Herodotus consisted in tying male inflorescences to the fruit-bearing branches. In modern times the more economical arrangement of

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[77] Tylor, 1890, p. 385.
[78] Ibid.
[79] Ibid., p. 386.

> inserting one or two sprigs . . . is in general use in date-growing districts. Lastly, it appears that the plan of shaking pollen from the male over the female flowers [as described in Theophrastus and Pliny] not only obtained in ancient, but has continued in modern times. It is this method which especially concerns the present argument.[80]

When we read for ourselves the full passage on date palm reproduction in Pliny's *Natural History*, we find descriptions of various methods of pollination and not just the 'sprinkling' method. In his enumeration of these methods, Pliny first described pollination by wind aided by the placement of female palms around a male tree.

> . . . it is stated that in a palm-grove of natural growth the female trees do not produce if there are no males, and that each male tree is surrounded by several females with more attractive foliage that bend and bow towards him; while the male bristling with leaves erected impregnates the rest of them by his exhalation and by the mere sight of him, and also by his pollen; and that when the male tree is felled the females afterwards in their widowhood become barren. And so fully is their sexual union understood that mankind has actually devised a method of impregnating them by means of the flower and down collected from the males, and indeed sometimes by merely sprinkling their pollen on the females.[81]

Tylor does not refer to this passage in his own discussion, and, as noted above, he questioned the adequacy of pollinating date palms via natural means. Noteworthy, though, is Tylor's own description of the genies as representing 'fertilizing winds,' mentioned at the end of his article.[82] It seems Tylor chose to disregard the initial part of Pliny's description concerning wind pollination because the claim of formal similarity regarding the 'cone' held by the genies seemed to him to fit well with Pliny's description of 'sprinkling pollen on the female' palms. Furthermore, Tylor chose to disregard Herodotus's 'branch-tying' method, which was a method supposedly used in Babylonia. It would appear that Tylor chose select features from each of the ancient authors' descriptions to fit his specific interpretation of the Assyrian reliefs.

Tylor saw in the hand-held 'cone' the male inflorescence (or flowers, or spadix) of the date palm discussed by the ancient authors, which could either be tied to the female palm or held over her own flowers (or spadix) and shaken to release the pollen. Tylor identified the 'cone' object as a male spadix by asserting the claim of formal similarity.

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[80] Ibid., p. 387.

[81] Pliny, *Natural History with an English Translation in Ten Volumes,* Book 13 (ch. 7.34–35), trans. H. Rackham, London and Cambridge, MA, 1945, p. 119.

[82] Tylor, 1890, p. 390, '. . . the genies represent the fertilizing winds, or national deities whose fertilizing influence comprised or was typified by the process of fecundating the date-palm.'

> I now proceed to examine the form of the male inflorescence which is conveyed to the fruit-bearing date-palm, in order to show its close resemblance to the sculptured cone carried in the hand of the Assyrian winged deity . . . from one of the colossal bas-reliefs of the British Museum.[83]

Tylor presented a photograph of a dried male spadix (fig. **4**), as well as a photo and a drawing of a spadix still attached to its spathe (figs. **6–7**), and placed these next to an example of an Assyrian hand-held cone (fig. **5**). His examples (figs. **4, 6**), taken from a garden on the Italian Riviera just over the border from France, are quite small and uniform. It is helpful to consider date palm spadices from more southerly latitudes that are still attached to the tree, as well as specimens that have been taken from the tree and dried in the sun: both types of examples appear much larger and less uniform than the specimens Tylor has presented. For example, fig. **8** shows a flowering male spadix still attached to the tree, and fig. **9** shows a flowering male branch breaking through its spathe. Fig. **10** shows male spadices being dried in the sun for storage and later use for artificial fertilization of female date palms (and standing next to a meter stick). None of these examples can be described as resembling Tylor's examples.

It is also useful to consider female date palms here, since we know female palms gave out similar-looking flowering branches. Female date palms flower shortly after the males. The female spathes resemble male spathes: both appear as a greenish brown flattened sheath, 40–70 cm long, narrowing at the ends and in some cases with a substantial bulge in the middle. When their spathes split, they give forth spikelets of flowers that can then receive pollen. The photo in fig. **11** and drawing in fig. **12** show female spadices breaking through their spathes in a burst of flowers that resemble a mass of small balls stuck to a string. Knowledge of male and female flowering date palm spadices poses problems for Tylor's claim of formal similarity, since the hand-held conelike objects do not resemble date palm spadices, and since male and female spadices more closely resemble each other than they do the hand-held 'cones.'

There is also the problem of how the genies hold the 'cone.' Their gesture conveys that the 'cone' is an object intended to be grasped in the cup of the hand, a gesture one could not use to hold a male spadix intended to be shaken onto a female's flowers. We can see that both male and female inflorescences have narrow ends that form part of the outer sheath, or spathe, enclosing their flowers. Tylor presented two such examples, of spadices with their spathe 'ends' still attached (figs. **6–7**). However, these examples, as well as the spadices shown in fig. **10**, do not compare well with the conelike object held by the genies. Perhaps Tylor recognized this fact and therefore chose a photograph of someone holding an inflorescence at its mid-section, with the narrow end of the spathe obscured (fig. 4). Holding the inflorescence in this way, at its broadest point, is not the most natural or economical way of imparting pollen to a tree and does not in any case resemble the cupped gesture of the genies, since their palms are turned round behind, and their fingers are closed upon the objects they are holding. Tylor's photograph is very misleading.

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[83] Ibid., p. 387.

Did Tylor believe the hand-held 'cone' was a conventionalized representation of a male spadix, much as he believed the AST was a conventionalized representation of a date palm grove? It is clear Tylor did not hold this view:

> The similarity of the sculptured cone to the real palm-inflorescence, taken together with the fact of its being shown as carried to the date-palm, might be considered to prove that the scene at the sacred tree represents the artificial fertilization. The further examination of the monumental evidence, far from invalidating the argument, confirms it by consistent details.[84]

Tylor must argue that the 'cone' is formally very similar to a male spadix in order to advance his fertilization theory. Similarly, Tylor is compelled to argue that the palmettes appearing on the AST represent female spadices ready to be fertilized by the 'cones.' We know he considered the palmettes on the AST as conventionalized representations of individual female date palms ('the [AST] may probably stand for a group or grove of palms'), and so he must consider those palmettes as further conventionalized representations of female spadices. This being so, one feels impelled to ask why it is that the male spadices were rendered in a naturalistic manner and the female spadices in a conventional manner, in the same composition?

As for the bucket held by the genies in their left hands, Tylor used a contemporary analogy to explain its ancient function for storing spadices:

> The basket or bucket held in the left hand corresponds with the basket carried at present in the East by the cultivator to hold his supply of pollen-bearing inflorescences when he climbs the fruit-bearing palms to fertilize them; this is the more necessary from the dropping of the flowers and the shedding of the pollen, much of which would be lost if the cones were carried loose. Thus sometimes the bucket carried in the hand of the winged figure serves to identify the scene even when the cone is not shown in the other hand.[85]

Tylor also drew upon the claim of social significance to support an identification of the AST as a date palm. He relied on an analogy between the date palm's significance to a Middle Easterner living in the eighteenth century (AD) and one living in the first millennium BC.

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[84] Ibid., p. 388.
[85] Ibid.

> Kaempfer [a physician, botanist and traveller writing in 1712] mentions the Turks being turned back from an expedition against Bassora by the threat of cutting down the male palms in the invaded district, so as to leave the soldiers without supplies; but this step, calamitous to the population, being delayed in execution, the invasion was accomplished. Thus it is no wonder that the Assyrian winged beings who carry in their hands the fertilizing cones, should occupy so conspicuous a place before the eyes of a nation on the palace-walls of Nineveh.[86]

Tylor also based his interpretations on the claim of Biblical parallels, that is, that we can identify the AST as a conventionalized representation of a date palm grove because of textual evidence from the Bible. Tylor followed Layard's interpretation, based on Ezekiel 10.8–9 and 1.8, that the Biblical cherubim were derived from Assyrian genies. Tylor further claimed that the specific relationship between the Assyrian genie and the AST must parallel that of the Biblical cherub and date palm. For this, he quoted descriptions of the decoration of Solomon's temple (e.g., 1 Kings 6.29–35), where cherubim and palms appeared together carved onto wooden panels. Tylor's claim of Biblical parallels is situated within the same context of analysis that existed for the *kiškānû*. Scholars such as Layard and Sayce, who relied on the Old Testament for their understanding of Neo-Assyrian art and texts, are both referred to by Tylor in his article. This approach, of matching Old Testament texts with both Mesopotamian texts and images to identify the *kiškānû* as the 'tree of life,' was also used to identify the AST as the 'tree of life' and as a date palm.

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[86] Ibid., p. 390.

5 Genies and cherubim

At the beginning of chapter 1, we quoted Layard's reactions upon encountering the winged genies seen in connection with the AST (e.g., fig. **2**). Layard's remarks were also addressed to the monumental winged, striding, human-headed bull and lion guardian figures recovered from palace entrances at, for example, Nimrud and Khorsabad; Layard had a strong impression that they too illustrated the cherubim described by Ezekiel.[87] Tylor used Layard's vivid descriptions to bolster the claim of Biblical parallels.

> . . . since the Assyrian sculptures became familiar to European eyes, their suggestive effect on the ancient Hebrew mind has been often thought of. One striking point of comparison with the mystic visions of Ezekiel was noticed many years ago by Layard. It is that the four forms of the living creatures of Ezekiel, man, lion, bull, [and] eagle, are precisely those of the Assyrian monuments. The winged bull and lion are made up of these and no other, and if we add to them the winged walking figures, they fall into the same scheme.[88]

In following Layard, Tylor believed that Ezekiel 10.8–22, and therefore 1.4–21, accurately described the winged creatures seen in fig. **2**. A familial relationship between Assyrian and Biblical winged images had been accepted by the time Tylor published his ideas, and this is indicated by Tylor's remark that 'since the Assyrian sculptures became familiar to European eyes, their suggestive effect on the ancient Hebrew mind has been often thought of.' Tylor referred us only to Layard for the comparison between Assyrian and Biblical winged creatures, but there were others who advanced similar views.

Scholars at this time were interested in images of Assyrian winged creatures (bull, lion and genie) whose function they derived from Akkadian ritual texts. These texts supplied the names for various guardian figures, which were matched with the images of the winged creatures. One of the figures referred to in the texts is known as *kurību*. Our understanding of *kurību*, and the image representing this type of guardian figure, is grounded in an early discussion concerning the etymological relationship between *kurību* and Hebrew *kerûb*, or cherub.

Lenormant examined the relation between the Akkadian *šēdu* and *kurību*, concluding they both referred to the winged, human-headed bulls protecting palace entrances. He further noted etymological and visual parallels between *kurību* and *kerûb*.

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[87] See Layard, vol. 2, 1849, pp. 460–64.

[88] Tylor, 1890, pp. 390–91, citing Layard, vol. 2, 1849, p. 465.

> Il est positif qu'on leur donnait [these supernatural beings, i.e., *šēdu*] aussi le nom de *kirubi*. Un monument talismanique de la collection de M. Louis de Clercq, portant une formule magique que nous trouvons répétée sur un grand nombre d'objets analogues, emploie le terme de Kiroub (écrit phonétiquement *ki-ru-bu*) là où dans les autres exemplaires on trouve celui de Shed [*šēdu*] ou le groupe idéographique qui y correspond. Pour les Chaldéo-Assyriens du X^e^ au V^e^ siècle avant notre ère, le Kiroub, dont le nom est identique à celui du Kéroûb hébraïque, était donc le taureau ailé à tête humaine. Il n'est pas douteux que les Israélites du temps des Rois et des Prophètes ne se représentassent plastiquement dans leur imagination les Kêroûbîm sous la même forme.[89]

This observation, that *kurību=kerûb*, led Lenormant to determine that both the Akkadian and Hebrew words referred to beings who had a talismanic function and who were also one and the same kind of guardian creature.[90] This interpretation was followed by both Ragozin and Count Goblet d'Alviella, French diplomat and world traveller.

> It has been discovered . . . that many of the sculptures which adorned the Assyrian palaces and temples were of talismanic nature. Thus the winged bulls placed at gateways were nothing but representations of an Accadian class of guardian spirits,—the *Kirību*, or Hebrew *Kerubim*, of which we have made *Cherub*, *Cherubim*—who were supposed to keep watch at entrances.[91]

> It is now no longer possible to interpret the traditions of the Hebrew people without connecting them with the beliefs of the other Semitic nations. Have we not learnt from the version of the Deluge, discovered some years ago in the cuneiform writings, how the Israelitish nation preserved certain Chaldæan myths, whilst transfiguring them by doing away with their polytheistic elements and by introducing a moral factor? The Bible itself dates its oldest traditions from Chaldæa, particularly the narratives referring to the Garden of Eden and its Paradisiacal Trees. . . . [T]he *kerubim* who guard its entrance certainly seem to be a creation of the mind revealed in the art and the creeds of Mesopotamia. They have nothing in common with the chubby *cherubs* of the Christian imagery; they bear a far stronger resemblance to the monstrous *genii* who guard the approaches to Assyrian palaces; their name

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[89] Lenormant, t. 1, 1880, pp. 118–19.

[90] Ibid., p. 129. 'Quoi qu'il en soit les kéroûbîm [*kerûbim*] placés à la garde de l'entrée du Gan-'Êden sont sûrement les taureaux à face humaine de l'architecture des rives de l'Euphrate et du Tigre.' See his entire discussion, pp. 109–39.

[91] Ragozin, 1886, p. 164.

> in the Bible itself alternates with *shôr*, 'a bull,' and numerous indications lead us to assume that they were either winged bulls with the face of a man, or winged *genii* with the head of an eagle.[92]

Ragozin's and d'Alviella's conclusion, that the bodily features of cherubim were the same as those of either winged bulls or genies, reminds us of Layard's initial observations on the matter.[93]

The view that the Assyrian genies reflected formal characteristics of the Biblical cherubim, and that the Biblical cherubim were derived from the Assyrian genies, helped to advance Tylor's date palm identification of the AST. Although Tylor had accepted that both sets of Assyrian winged creatures (lion/bull and genie) are the same as the cherubim, he narrowed the discussion to specific features concerning the genies alone. Layard had observed a relation between the Assyrian genies and Biblical cherubim in Ezekiel's vision (1.4–21) of the 'likeness of four living creatures, which had four faces, four wings, and the hands of a man under their wings on four sides.' Tylor focussed on two of these features, namely, the genies' human hands and wings. Basing his interpretation on Ezekiel 1.8 and 10.8–9 ('under the wings of the cherubim there appeared what seemed a human hand'), Tylor matched text to image.

> I have now to point out that the argument for the derivation of the Cherubim of Ezekiel from the Assyrian monuments may be carried further. In the prophet's description of the living creatures who he knew were cherubim, he says that 'they had every one four wings, and the likeness of the hands of a man was under their wings.' Now these are two special characteristics belonging to such an Assyrian deity as is shown here . . . majestically striding with the fertilizing cone in his hand. They form a combination which can hardly have repeated itself by accident. Modern observers are not indeed struck at first sight by the express mention of the hands under the wings, which to them seem almost a matter of course. But this is because the genii and angels to whose forms we are accustomed are themselves derived from the winged figures belonging to Assyria. It is improbable that at the time of Ezekiel there were any other types in the world answering the description of the four wings and the hands below them, except such Babylonian-Assyrian winged deities, and the adaptations of them by neighbouring nations.[94]

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[92] Goblet d'Alviella, 1894, pp. 152–53. See also p. 153, n. 1, where he cited Lenormant 'regarding the word *kerub*=bull.'

[93] Even without recourse to philological arguments, scholars at this time generally agreed that the genie and cherub were closely related, if not identical. See, e.g., Bonavia, 'Did the Assyrians know the Sexes of the Date Palm? No,' *The Babylonian and Oriental Record* 4/4 (1890), p. 94, where Bonavia described the eagle-headed genies as representing 'the notion of an invisible guardian angel protecting the palm trees and king.'

[94] Tylor, 1890, p. 391. See Tylor's note on p. 392 citing Ezekiel 10.8–9.

Tylor used this equation between genies and cherubim to advance the interpretation that the AST is equivalent to the date palm. He did this by drawing a parallel between the combination of the genie and AST seen on Assyrian wall reliefs and the combination of cherubim and palms described in the Old Testament. This is another example of Tylor's iconographic approach to understanding the AST. Tylor was thinking of passages in 1 Kings that describe the decoration of Solomon's temple, where cherubim and palms and flowers appear in relief on the walls and doors of the inner shrine and sanctuary of the temple (6.29–35), and the panels of the stands that were housed in the temple (7.36).

> Through the Phoenicians, the Assyrian [genie] figures had long before become familiar to the Hebrew mind, as appears when the Tyrian workmen are related to have adorned the temple of Solomon 'with carved figures of cherubim and palm-trees and open flowers.' This shows that among the Phoenician art-figures of Assyrian origin, familiar to us by many specimens, the cherub was a definite figure known by name, and not only was the conventional sacred tree of Assyria depicted beside it, but this was understood to be the date-palm.[95]

There are some problems with Tylor's equation between genies and cherubim: the cherubim described in Ezekiel 10.8–22 (and therefore 1.4–21) do not match any other cherubim described in the Bible.[96] From the different features and sets of features noted in various books of the Old Testament, it appears that a uniform conception of cherubim is not available to us.

Yet one suspects that, like Layard, Tylor was not really very concerned with matching each feature of Ezekiel's cherubim with that of the Assyrian genies. Rather, both scholars thought that the genies served as an inspiration for the later, more complex cherubim images described by Ezekiel.[97]

George Birdwood (Anglo-Indian official and author of numerous monographs on the arts of India) incorporated Tylor's equations of genies with cherubim and ASTs with date palms into his introduction to d'Alviella's book on the *Migration of Symbols.*

> . . . that the symbolical 'Tree of Life' of the Chaldaeans, Assyrians and Babylonians, is indeed but a conventional representation of the date palm is suf-

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[95] Ibid., pp. 391–92.

[96] In Ezekiel 28.14, they are described only as guardians, and in 41.18–19, they have two faces, one of a man and one of a lion. In other passages referring to cherubim they are described as either winged, as guarding the ark or as supporting God: see, e.g., Genesis 3.24; Exodus 25.18–20; 1 Samuel 4.4; 1 Kings 6.23–28, 7.29, 8.6–7; 2 Chronicles 3.10–13; Psalms 18.10, 80.1; Isaiah 37.16.

[97] Tylor quoted Layard's general conclusions, 'These coincidences . . . do certainly lead to the inference that the symbols chosen by the prophet were derived from Assyrian sculptures.' (Tylor, 1890, p. 391.)

> ficiently proved by the description given of the adorning of King Solomon's temple in I Kings vi.29–35: 'And he carved all the walls . . . round about with carved figures of cherubim and palm trees (*tamar*, the 'date palm'). . . . And for the entering of the oracle he made doors of olive tree . . . and he carved upon them carvings of cherubim and palm trees and open flowers, and overlaid them with gold, and spread gold upon the cherubim and upon the palm trees. . . . And the two doors of the fir tree . . . he carved thereon cherubim and palm trees and open flowers. . . .These are exact descriptions of the architectural decoration of the temples and palaces of Nineveh and Babylon, and they should satisfy anyone of, at least, the proximate botanical source of the Sacred Tree of the 'Nineveh marbles.'[98]

In addition to the 1 Kings passage, Birdwood cited Ezekiel 41.18 as further evidence of a date palm identification for the AST ('And it was made with cherubim and palm trees, so that a palm tree was between a cherub and a cherub.')[99] D'Alviella reiterated this Ezekiel passage in the body of his own text.

> In the description of the Temple which Ezekiel has left us, he says that the ceiling was 'made with *kerubim* and palm-trees, so that a palm-tree was between a *kerub* and a *kerub*.' This is exactly the position of the Sacred Tree between its acolytes on the monuments of Mesopotamia.[100]

Tylor's constructed relationship between the genie and AST, and his translation of it as the cherub and palm, had now successfully entered the discussion.

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[98] G. Birdwood, 'Introduction,' in d'Alviella, 1894, pp. xiv–xv. Tylor expressed great regard for a chapter of Birdwood's book (G. Birdwood, *The Industrial Arts of India*, vol. 1, London, 1880, pp. 325–44, 'The Knop and Flower Pattern'). There Tylor thought he found support for his fertilization theory; see Tylor, 1890, pp. 388–89, 'My attention has lately been called to Sir George Birdwood, in his dissertation on "The Knop and Flower Pattern," having identified the long-stalked cones which flourish out from the fan-like head of the date-palm as being its fruit-clusters, recurring also in more conventional forms in ornamental designs. I am glad to be able to cite this dissertation, one of the most important contributions to the theory of art-development, to show that its writer, approaching the subject from quite a different point of view, so long ago arrived at this opinion as to the representation of the female inflorescences of young date-clusters in Assyrian art.'

[99] D'Alviella, 1894, p. xv.

[100] D'Alviella, 1894, p. 153.

6 The cone, the bucket and the climate

As early as 1864, George Rawlinson had written about the function of the conelike object and bucket and, in so doing, postulated a meaning for the activity of the genies. The image he had in mind was not the genies attending to the AST but the genies attending to the Assyrian king in exactly the same way as seen in fig. 1. Here genies point the 'cone' with their right hand and hold the bucket with their left, as they do in connection with the AST. However, in fig. 1 they point the 'cone' at the head of the king. Rawlinson's observations concerning this type of imagery laid the foundations for the most damaging arguments against Tylor's fertilization theory.

> It is probable that, besides gods, the Assyrians acknowledged the existence of a number of genii, some of whom they regarded as powers of good, others as powers of evil. The winged figure wearing the horned cap, which is so constantly represented as attending upon the monarch when he is employed in any sacred function, would seem to be his tutelary genius—a benignant spirit who watches over him, and protects him from the spirits of darkness. This figure commonly bears in the right hand either a pomegranate or a pine-cone, while the left is either free or else supports a sort of plaited bag or basket. Where the pine-cone is carried, it is invariably pointed towards the monarch, as if it were the means of communication between the protector and the protected, the instrument by which grace and power passed from the genius to the mortal whom he had undertaken to guard. Why the pine-cone was chosen for this purpose it is difficult to conjecture. Perhaps it had originally become a sacred emblem merely as a symbol of productiveness, after which it was made to subserve a further purpose, without much regard to its old symbolical meaning. The sacred basket, held in the left hand, is of still more dubious interpretation. It is an object of great elegance, always elaborately and sometimes very tastefully ornamented. Possibly it may represent the receptacle in which the divine gifts are stored, and from which they can be taken by the genius at his discretion, to be bestowed upon the mortal under his care.[101]

Rawlinson's main observation, adopted by later skeptics of the fertilization theory, concerns the activity of pointing the 'cone' at the king. If 'cone'-pointing is meant to be an act of pollination, one wonders why the genies are trying to pollinate royalty. Rawlinson regarded the genies as protectors and the bucket and 'cone' as instruments aiding in that protection. The 'cone' transmitted beneficence and security, and the basket contained those powers. The genies activated this ritual process by dipping their 'cones' into the baskets. Perhaps the original meaning of the 'cone' was associated with productiveness, but Rawlinson supposed its later function, as shown on the reliefs, need not have been connected to this meaning.

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[101] G. Rawlinson, vol. 2, 1864, pp. 263–64. See also Rawlinson, vol. 1, 1885, pp. 359–60.

Lenormant quoted Rawlinson's ideas concerning the protective nature of the genies' gestures and instruments when he considered the meaning of the activity of pointing the 'cone' at both the Assyrian king and AST.

> C'est cette pomme de pin ou de cèdre que, dans les sculptures assyriennes, les dieux et les génies portent si fréquemment à la main, la présentant toujours la pointe en avant, soit qu'ils gardent l'arbre de vie [AST], soit qu'ils accompagnent le roi pour le protéger. Dans ce dernier cas, la pointe du cône végétal est constamment tournée vers le monarque, 'comme si elle était le moyen de communication entre le protecteur et le protégé, l'instrument par lequel la grâce et le pouvoir passent du génie au mortel qu'il a pris sous sa garde' (G. Rawlinson, *The Five Great Monarchies of the Eastern World*, 2d ed., vol. 2, p. 29).[102]

In an effort to further understand the function of the 'cone,' Lenormant analyzed incantations involving Ea and Marduk. In one spell, the 'fruit of the cedar' is held in front of a sick person—cedar because it is that tree which provides a charm against evil. In another spell, cedar wood is put into a vessel filled with water. Based on these kinds of texts, Lenormant argued 'La pomme de cèdre ou de pin est donc l'emblême et l'instrument du "charme de vie" dont Êa est le maître et son fils Marduk le distributeur.'[103] The philologist William St. Chad Boscawen supported Lenormant's explanation that the cone was a life charm and postulated that the bucket was the carrier of holy water.[104] Both believed that the activity seen on

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[102] Lenormant, t. 1, 1880, p. 83, n. 2.

[103] Ibid., p. 85, n. 2. See also p. 84, n. 2., 'Par exemple, dans un morceau magique encore inédit, on voit, le dieu Êa . . . prescrire à son fils Marduk . . . un rite mystérieux qui guérira un homme malade par l'attaque des démons. "Prends, lui dit-il, le fruit de cèdre, et présente-le à la face du malade; le cèdre est l'arbre qui donne le charme pur et repousse les démons ennemis, tendeurs de piéges . . ."' Lenormant also cited incantations from H. C. Rawlinson, *Cuneiform Inscriptions of Western Asia,* vol. 4, *A Selection from the Miscellaneous Inscriptions of Assyria,* London, 1875; see *CT* 4, 16, 2, obv. 30–35, 'Ea says to Marduk, take a vessel and put water in it . . . put in it some wood of white cedar and introduce the charm which comes from Eridu thus powerfully completing the virtue of the enchanted waters.' It was supposedly upon the core of cedar that Ea's name was engraved, 'Upon the heart of which Ea has his name recorded'; cf. *CT* 4, 15, rev. 10–13; *CT* 4, 16, 2, 11; *CT* 4, 29, obv. 1, 29–31.

[104] W. St. Chad Boscawen, 'Notes on the Assyrian Sacred Trees,' *The Babylonian and Oriental Record* 4/4 (1890), p. 96, 'Lenormant has quoted a passage which certainly points to it [cedar] as a life-giving charm, "the cedar is the wood which gives the holy charm," and

Aššurnasirpal's walls concerned ritual activity, specifically magical spells of a protective nature.

Some supporters of a date palm identification for the AST initially challenged the explanation of the genies' activity and instruments as fertilizing by questioning whether the Assyrians knew that date palms are dioecious. For example, Bonavia, who argued that the Assyrians did not know the sexes of date palms, and therefore could not possibly be depicting scenes of artificial fertilization vis-à-vis the AST, analyzed the function of the 'cone' and bucket in a variety of scenes in order to find an alternative explanation to the fertilization theory. He supported Rawlinson's and Lenormant's views that the 'cone' and bucket must represent actual ritual instruments. He arrived at this conclusion after first noting that date palms cannot fruit as far north as Assyria, the 'birthplace' of AST images. Such information would appear to nullify an explanation of the genies' activity as fertilizing and require an alternative interpretation.

Bonavia had argued that the AST represented a date palm because of that tree's great social significance to Assyrian culture. However, he eventually withdrew his full support for that particular claim.

> That the date crop may have been important is very probable, but that it was *indispensable* to the existence of the people of Assyria does not appear more likely.[105]

Bonavia shifted his position on the claim of social significance after considering the issue of climatic conditions for date harvesting in Assyria. He noted a discussion between the philologist Theophilus Pinches and archaeologist Hormuzd Rassam that revealed date palms grew as far north as Nineveh, though they did not fruit there.

> Mr. Theo. G. Pinches . . . wrote to Mr. Rassam to make some inquiries about date trees in Assyria in the vicinity of Nineveh. Mr. Rassam replied that it grows there, but does not fruit.[106]

Tylor had used the claim of social significance to support his fertilization theory and to support his identification of ASTs, appearing specifically in Assyrian contexts, as date palms. His appeal to the claim of social significance was based upon the assumption that date palms were an important economic asset to Assyria, yielding an essential agricultural product. But if

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in the magical text the white cedar with holy water is part of the charm. It was upon the centre core of this wood that the name of Ea was engraved. . . . In another liturgical text ([*CT*] 4, 64), I find this cup of holy water of [Marduk] mentioned: "May the cup of holy water of [Marduk] endow him with health."'

[105] Bonavia, 'Did the Assyrians know the Sexes of the Date Palm? No,' *The Babylonian and Oriental Record* 4/3 (1890), p. 67 (emphasis his).

[106] Bonavia, 4/4 (1890), p. 93.

date palms grew in Assyria without producing harvestable fruit, what could possibly have been the motivation behind creating and placing images of genies fertilizing conventionalized representations of date palms in an Assyrian context?

Prior to the publication of Tylor's article, scholars had looked into the question of date harvesting in ancient Assyria. In his chapter on the climate and conditions of Assyria, George Rawlinson relied on a combination of ancient classical and contemporary sources to analyze the fertility of the area, to learn what was possible to grow and harvest there. He arrived at a number of conclusions that help answer questions about the possibility of date harvesting in Assyria in the first millennium BC.

> Historically . . . we find . . . temperatures and conditions were anciently very nearly what they are now.[107]

> The fertility of Assyria is a favourite theme. . . . Owing to the indefiniteness of . . . geographical terminology, it is however uncertain in many cases whether the praise bestow[ed] upon Assyria is really intended for the country . . . called by that name, or whether it does not apply to the alluvial tract . . . which is more properly termed Chaldæa or Babylonia. Naturally Babylonia is very much more fertile than the greater part of Assyria. . . . The ancients spoke of the barrenness [of Assyria].[108]

> The only tree which is known anciently cultivated in Mesopotamia is the date palm, and as this ceases to bear fruit about latitude 35° (where the most southern part of Assyria extends from latitude 34° to 35°30') its greater cultivation could have prevailed only in a very small portion of the country.[109]

> In the south the date palm grows well as far as Anah on the Euphrates and Tekrit on the Tigris. Above that latitude it languishes, and ceases to give

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[107] G. Rawlinson, vol. 1, 1862, p. 266 (see pp. 264–66 for his full discussion of Assyria's climate and conditions—I have only quoted here his conclusions). See also Rawlinson, vol. 1, 1885, p. 141 and pp. 139–41 for the full discussion.

[108] G. Rawlinson, vol. 1, 1862, pp. 267–68. See also Rawlinson, vol. 1, 1885, p. 141. For an example of what Rawlinson referred to as 'the indefiniteness of . . . geographical terminology,' see Herodotus, *Histories*, 1.174–93, where Herodotus placed Babylon and Babylonia within the sphere of Assyria; however, Herodotus (1.193) did differentiate between the agricultural products of Assyria (grain) and Babylonia (the 'fruit-bearing kind' of date palm).

[109] G. Rawlinson, vol. 1, 1862, p. 267 and n. 6. Here Rawlinson footnoted the work of F. R. Chesney, *Narrative of the Euphrates Expedition Carried on by Order of the British Government during the years 1835, 1836, and 1837*, vol. 1, London, 1868, p. 106. (Chesney, 1868, was published after Rawlinson, vol. 1, 1862, yet is still quoted by Rawlinson; for the present I can only surmise that Rawlinson saw a manuscript version of Chesney's *Narrative*.) See also Rawlinson, vol. 1, 1885, pp. 140–41 and n. 15. Here Rawlinson footnoted Pliny, *Natural History*, 18.17.

> fruit altogether about the juncture of the Habur with the one stream and the Lesser Zab with the other.[110]
>
> The unproductive [date palm] tree . . . which the Assyrians used for building purposes, will grow and attain a considerable size.[111]

Rawlinson's conclusions regarding the importance of the date palm to Assyria, and the fertility of the land more generally, contrast with those of Tylor. According to Rawlinson, the date palm is not among the most important fruit trees in Assyria.[112] Nor could the date palm have fruited as far north as Nimrud, the location of Aššurnasirpal II's palace, once home to so many images of the AST.

Rawlinson had demarcated the southernmost limit of Assyria as standing at latitude 34° to 35°30'. This means that dates could, potentially, have been harvested in Assyria proper between latitudes 34° and 34°40' (where Tikrit, or Takrīt, stands: see fig. 27). And, indeed, Rawlinson reported that dates were grown in Assyria. He does not specify where—but it must have been within that small margin of space that constituted Assyria's southernmost limit around latitude 34° ('its greater cultivation could have prevailed only in a very small portion of the country').

> We have not much account of the products of Assyria proper in early times. Its dates were of small repute, being greatly inferior to those of Babylon.[113]

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[110] G. Rawlinson, vol. 1, 1862, p. 273 and n. 6. Here Rawlinson footnoted Chesney, vol. 1, 1868, p. 107, and Layard, vol. 2, 1849, p. 423. See also Rawlinson, vol. 1, 1885, p. 144 and n. 42. Here Rawlinson footnoted Herodotus, *Histories*, 1.193.

[111] G. Rawlinson, vol. 1, 1862, p. 273 and nn. 7–8. Here Rawlinson footnoted Strabo, *Geography*, 16.1–5; Pliny, *Natural History*, 13.4; Chesney, vol. 1, 1868, p. 107; and Layard, vol. 2, 1849, p. 423. See also Rawlinson, vol. 1, 1885, p. 144 and n. 43. Here Rawlinson footnoted Ammianus Marcellinus, *Roman History*, 24.3; and Zosimus, *History*, 3.173–79. See also Pliny, *Natural History*, 9.121, 'The barren kinds [of date palms] are used in Assyria and throughout the whole of Persia for building timber and for the more luxurious articles of manufacture.'

[112] See G. Rawlinson, vol. 1, 1862, p. 274, 'Of fruit trees the most important are the orange, lemon, pomegranate, apricot, olive, vine, fig, mulberry and pistachio-nut.' See also Rawlinson, vol. 1, 1885, p. 144. And see Layard, vol. 2, 1849, p. 423, for another angle on the same point, 'Sesame, millet, and corn formed anciently, as they still do, the principal agricultural produce of Assyria.' For ancient confirmation of this, see Herodotus, *Histories*, 1.193, where he described Assyria as rich in grain but not in fruit trees, 'As a grain-bearing country Assyria is the richest in the world. No attempt is made there to grow figs, grapes, or olives or any other fruit trees, but so great is the fertility of the grain fields that they normally produce crops of two-hundredfold, and in an exceptional year as much as three-hundredfold. The blades of wheat and barley are at least three inches wide. As for millet and sesame, I will not say to what an astonishing size they grow, though I know well enough. . . .'

[113] G. Rawlinson, vol. 1, 1862, p. 271 and n. 3. Here Rawlinson footnoted Pliny, *Natural History*, 13.4. See also Rawlinson, vol. 1, 1885, p. 143 and n. 30. Here Rawlinson footnoted Xenophon, *Anabasis*, 2.3–15, and Philostratus, *The Life of Apollonius of Tyana*, 1.21.

> Pliny speaks of the Assyrian dates as used chiefly for fattening pigs and other animals.[114]

This tells us that while Assyrian date palms could fruit (presumably growing in the southernmost margin of Assyria), and even produce dates that pigs found edible, their yield and quality was not such that they constituted a significant commodity. It is likely that the barren date palm was intentionally cultivated in Assyria, but mainly for building and manufacturing purposes.[115]

Rawlinson did not refer to the research of the botanist Alphonse de Candolle, who, by 1855, had demarcated the limits of growth for the date palm. De Candolle's limits for the flowering and fruiting of date palms in Iraq are even more restricted than those reported by Rawlinson.

> Les limites du Dattier ont été exposées dans le plus grand détail par M. de Martius, dans son bel ouvrage sur la famille des Palmiers. . . . J'aurai peu de chose à ajouter à un travail aussi consciencieux. L'auteur distingue trois limites polaires successives. Jusqu'à la limite la plus méridionale, on voit le Dattier donner des fruits de bonne qualité, et il est alors cultivé généralement. Plus loin, il donne des fleurs, mais les fruits ne mûrissent pas. Plus loin encore, il ne donne que des feuilles et ne fleurit pas. La limite intermédiare est peut-être un peu difficile à préciser. Elle dépend des années; elle tient souvent à ce que des arbres isolés se trouvent appartenir à l'un des deux sexes, et M. de Martius nous apprend que, parmi les Dattiers semés, il naît plus de mâles que de femelles. Nous nous attacherons, en conséquence, à préciser la limite du Dattier fructifère et du Dattier seulement folifère.[116]

> Anah, sur l'Euphrate (32°20' lat.), est le premier point où l'on rencontre des Dattiers en descendant le fleuve (Chaix, sur le voyage de Chesney . . . mai 1839), et Tekrid, sur le Tigre (34°40'). A Bagdad, les dattes mûrissent bien (33°19' lat.).[117]

> Je m'arrêterai aux limites suivantes, comme représentant le mieux les faits:
> - Limite du Dattier donnant dans la majorité des années de bons fruits qui sont exportés ou consommés en grande quantité: Bagdad (33°19' lat.).

However, Herodotus painted a rather different picture of Assyrian agricultural products (see note above).

[114] G. Rawlinson, vol. 1, 1862, p. 271 and n. 3 = Pliny, *Natural History,* 13.4.

[115] It is well known that every part of a palm can be used by humans for food, fuel, housing, textiles, etc., and so the value of the tree is not solely determined by whether it produces dates.

[116] A. de Candolle, *Géographie botanique raisonnée ou exposition des faits principaux et des lois concernant la distribution géographique des plantes de l'époque actuelle*, t. 1, Paris, 1855, pp. 343–44.

[117] Ibid., p. 345.

> ● Limite du Dattier ne portant jamais ou presque jamais de fruits, cultivé par curiosité ou pour ses palmes: Anah, sur l'Euphrate (32°20' lat.), Tekrid, sur le Tigre (34°40'). Entre ces deux limites le Dattier est plus ou moins cultivé; il fleurit plus ou moins souvent; s'il donne des fleurs, les fruits mûrissent plus ou moins fréquemment et sont d'une maturité souvent douteuse.[118]

If date palms did grow as far north as Anah ('Anā) or Tikrit (Takrīt) (see fig. **27**), it was, according to de Candolle's findings, more for their trunks/leaves than for their fruit. De Candolle's limits restrict the region of date harvesting in Mesopotamia well to the south of Assyria proper.

Nineteenth-century date palm theorists, aware that date palms could grow but not fruit for harvest in Assyria, acknowledged a problem with Tylor's claim of social significance and fertilization theory. They resolved this problem by focussing on the meaning of the genies' activity and instruments and interpreting the meaning in one of two ways. They explained these figures as either representing a specific act of purification or as representing a general metaphorical act of reproduction.

Since Bonavia had defined the AST as a date palm, Tylor's explanation of fertilization was, theoretically speaking, acceptable to him. However, in his own survey of Assyrian images, Bonavia observed what appeared to him to be two anomalies in Tylor's theory: (1) that there were numerous instances where the 'cone' and bucket appeared separate from the AST, and (2) that the genies with their 'cones' attended to various versions of the AST, some of which could not be described as conventional renderings of date palms.

> Dr. Tylor's [fertilization] theory seems to have some support when the cone is pointed towards the sacred tree, made up of a date tree, and of ornamentations taken from the head of foliage of the same tree; but when the cone is pointed towards the back hair of the king, or is pointed at the entrance of a city, or temple, or palace, this theory loses all its force, and we must hunt up some other theory, in which not only a fir-cone comes in, but in which a *metal* bucket takes a *prominent* part.[119]
>
> Then supposing the cone to represent the male inflorescence of the date palm, we have in [our fig. **13**], a piece of embroidery representing a genius

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[118] Ibid., p. 346. See also de Candolle, *Origin of Cultivated Plants, The International Scientific Series*, vol. 49, rep. of 2nd ed., 1886, New York, 1959, p. 301, 'The date-palm has existed from prehistoric times in the warm dry zone, which extends from Senegal to the basin of the Indus, principally between parallels 15 and 30. It is seen here and there further to the north, by reason of exceptional circumstances and of the aim which is proposed in its cultivation. For beyond the limit within which the fruit ripens every year, there is a zone in which they ripen ill or seldom, and a further region within which the tree can live, but without fruiting or even flowering. These limits have been traced by Martius, Ritter and myself. It is needless to reproduce them here . . .'

[119] Bonavia, 1894, p. 74 (emphasis his).

> fertilizing a number of cones on another kind of conventional tree. And . . . we have genii doing the same thing [in other examples, e.g., fig. **14**]. So that Dr. Tylor's theory appears to be only plausibly applicable when applied to the genius in front of the supposed palm grove. When applied to the genius in the same attitude and holding in his hands the same objects but in other situations, this theory becomes anything but satisfactory. . . . [Nor] can we suppose that the genii are fertilizing the pomegranate tree [as seen in fig. **15**].[120]

In differentiating AST-types, for instance here the 'cone-type' (figs. **13–14, 16**) and the 'pomegranate-type' (fig. **15**), Bonavia challenged Tylor's fertilization theory by focussing on questions of 'botanical' identification. In cases where date palm-like ASTs appeared, Bonavia considered the fertilization theory at least a possibility. However, in other cases, for instance where ASTs had cones or pomegranates as their dominant feature, Bonavia argued that it made no sense for us to think that genies were fertilizing these other kinds of 'trees.' Tylor, on the other hand, had explained all these various 'tree'-types as conventionalized versions of date palms, an explanation apparently motivated by his desire to apply the fertilization theory to all instances where genies, 'cones,' buckets and ASTs appeared. Tylor therefore described, for instance, the 'cone-type' AST (seen in our figs. **13–14, 16**) in the following words.

> The conventional outlines and combinations of the various parts of the palm-tree, though difficult to follow, especially when they have passed into ornament, often seem to show that the artist has the sense of their meaning. Thus on [fig. **16**], the inflorescences on their long bending stalks may be intended as partly seen through the opening of the split spathe, and they are often more conventionally rendered in ornamental borders. Or they may be shown without the spathe, as on the royal robe from Nimrud, of which a portion is here figured [fig. **13**]. . . . Here the winged deities with cone and bucket not only approach the sacred palm-tree, but are bringing into contact the male and female inflorescences, and the scene of fertilization is complete.[121]

In another case (fig. **17**), Bonavia regarded this motif (which still defies identification) as purely ornamental, while Tylor regarded it as 'the head of the palm seen from above or below.'[122] Where Tylor saw consistent visual parallels among all the various AST-types, and between these types and actual date palms, Bonavia saw differentiation. The difference in either scholar's description and identification of the various AST-types tells us something about how each used iconographical theories to answer questions of a pre-iconographical nature. Bonavia found the iconographical explanation of fertilization possible for 'trees' that looked like date palms but not for 'trees' that had no formal similarities to date palms, whereas Tylor found the fertilization theory solved the pre-iconography of all the various AST-types (as date palms).

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[120] Bonavia, 4/4 (1890), pp. 91–92. Regarding the 'cone-type' of AST, Bonavia cited this example from G. Perrot and C. Chipiez, *Histoire de l'art dans l'antiquité*, t. 2, *Chaldée et Assyrie*, Paris, 1882–1914, pl. 443 (our fig. **13**), as taken from F. Lajard, *Introduction à l'étude du culte public et des mystères de Mithra an Orient et en Occident*, Paris, 1847.

[121] Tylor, 1890, p. 388.

[122] Ibid., p. 392. Bonavia, 1894, pp. 80–82, 'I confess that in this figure [our fig. **17**] I can see nothing more than an ornament to fill a certain space. . . . [A]nd it would therefore seem justifiable to look upon [this] composition as nothing but an ornamental group, without any particular meaning whatever.'

If Tylor was motivated to see all ASTs as date palms because of his commitment to his own fertilization theory, then Bonavia was motivated to see major differences among AST-types because of his belief that Assyrians did not know that date palms are dioecious (and therefore could not know/practice artificial fertilization). Eventually, Bonavia accepted textual evidence that 'proved' 'Babylonians' had such knowledge.[123] Yet he then wondered why, since artificial fertilization of date palms was so well known, this procedure was not depicted in art as a mundane activity but only (allegedly) as a mythical activity: 'Everybody must have known that fertilization of date trees was done by ordinary men; yet this is never so shown.'[124] He questioned the assumption that since Assyrians knew of and practiced artificial fertilization, their images must have depicted it.[125]

It was from this perspective that Bonavia engaged the ideas of Rawlinson, Lenormant and Boscawen, whose interpretations motivated Bonavia to read the genies' activity and instruments in other terms. According to Bonavia,

> . . . we must hunt up some other theory, in which not only a fir-cone comes in, but in which a *metal* bucket takes a *prominent* part.[126]

He drew upon the cuneiform texts analyzed by Lenormant and Boscawen to support his idea that the 'cone' was a specific article of paraphernalia used in Assyrian rites.

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[123] See Bonavia, 'Did the Assyrians know the Sexes of the Date Palm? No,' *The Babylonian and Oriental Record* 4/5 (1890), p. 117. This is the same textual evidence presented by Tylor, 1890, based on the classical authors.

[124] Bonavia, 1894, p. 78.

[125] Bonavia, 4/3 (1890), p. 67. See also Bonavia, 4/5 (1890), p. 116; and finally, Bonavia, 1894, p. 74. This assumption is certainly embedded in the literature, i.e., that since the sexes of date palms were known (as was artificial fertilization) in first-millennium BC Mesopotamia, it follows that the AST and genie composition illustrates artificial fertilization. See the exchange between Bonavia and Terrien de Lacouperie in Bonavia, 4/5 (1890), pp. 116–17 and De Lacouperie, 'Stray Notes on Ancient Date Palms in Anterior Asia,' *The Babylonian and Oriental Record* 4/4 (1890), pp. 117–18. The fact that the sexes of date palms were known, and even that artificial fertilization of date palms was known and practiced, does not suffice as evidence to prove that the genies are fertilizing the AST.

[126] Bonavia, 1894, p. 74 (emphasis his).

> The cedar cone was supposed to bear God's name inscribed on it, and was placed in the hand of sick persons to cure them. It was evidently believed to have some talismanic virtue. This belief appears distinctly made known from certain cuneiform inscriptions.[127]

The sacred properties associated with the wood and cone of the cedar tree suggested to Bonavia that the 'cone' represented in the images was more likely to be cedar than fir or pine.[128] He also analyzed the 'cone's' physical features and realized that these features lent themselves well to sprinkling a light liquid from one source to another.

> The cedar-cone, from its sacredness and scaly irregular surface, would not only spiritually, but also mechanically, naturally come in as a very *handy* 'aspergillum.'[129]

He then evaluated the properties of the bucket held by the genies by asking,

> With regard to the vessel held by the genius in one hand, are we justified in calling it a 'bucket or a basket'? Is it a water tight metal or wooden bucket, or a wicker work basket? Whatever it may be, it is a constant attendant of the cone, and must therefore mean something in connection with what the genius is supposed to be doing.[130]

Bonavia looked at the handles of the buckets depicted on Neo-Assyrian reliefs and catalogued how they were fastened to the body of the vessel in order to determine their material. He believed that a number of buckets were made of metal, and in this he followed the proposition made by the archaeologist Georges Perrot and archaeologist/architect Charles Chipiez, who had also examined the buckets represented on Neo-Assyrian wall reliefs.[131] Bonavia explained the importance of establishing the material of the bucket.

> If a bucket, it is more likely to have been intended to convey the idea that it contained a *liquid*. If a basket, such an idea must be excluded. Upon the whole, the resulting impression is that this vessel was intended for a water-tight metal bucket, such as the 'dôl' of India, used for drawing water out of wells.[132]

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[127] Bonavia, 4/4 (1890), p. 92. See also Bonavia, 1894, pp. 65, 85 (where he referred to Boscawen's translations), and pp. 76, 87 (where he referred to Lenormant's translations).

[128] Bonavia, 1894, pp. 86–87.

[129] Bonavia, 4/4 (1890), p. 96. I myself have found that dipping a cone in water and shaking it forward is an effective way of sprinkling water onto another object.

[130] Ibid., p. 89.

[131] Ibid., pp. 89–90.

[132] Ibid., p. 91. See also Bonavia, 1894, pp. 72–73. Wicker baskets can hold water, too, though this need not vitiate his basic premise.

Bonavia concluded the liquid held in the bucket must have been 'holy water' for sprinkling on persons, places and things to keep harmful demons at bay.

> It is not improbable therefore, that the Assyrians . . . may have used the cedar-cone . . . as an 'aspergillum,' dipping it into holy water and sprinkling it about. If this supposition be tenable, the ever present bucket would explain the need of a water-tight vessel for holding holy water. Sprinkling holy water by means of the holy [cedar] cone, round the groves, and round the king's person, and at the entrance of the palace would then become sensible enough. Harm and demons, and other bad spirits, would be kept out of the way.[133]

Boscawen, who had expressed his support for Bonavia's interpretation, provided a contemporary analogy for the aspergillum theory.

> The following extract from a letter recently received from Cairo seems to show the custom as suggested by Dr. Bonavia still exists in the East: 'Last week an Oriental showed me an Arabic book he was reading, in which were some engravings of the Assyrian gods from the walls of the British Museum. I asked him what fruit he thought was represented, at the same time translating to him the discussion in the [*Babylonian and Oriental*] *Record* Volume 2/7, which I have here' (Bonavia, 'The Cone Fruit of the Assyrian Monuments,' 1888). He laughed out quite merrily, at the idea of its being a fruit which the god holds, and added: Had not I and people in England noted that in the other hand the god holds a water basket? He maintained that the cone was a kind of squirt for sprinkling holy water, to be replenished from the basket. He added that by some Oriental sects, at some ceremonies, these identical articles are still thus used, and promised sometime to put me in the way of seeing the cone and water baskets so used.[134]

Bonavia thought his aspergillum theory explained the function of the 'cone' and bucket in any number of different circumstances where the two instruments appear together.

> Such appears to be the most rational way of interpreting the spiritual idea pictured by the Assyrian artists on their sculptures. It is one which would appear to meet the needs of all cases where cone and bucket are found in combination.[135]

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[133] Bonavia, 4/4 (1890), p. 94. See also, Bonavia, 1894, pp. 74–75.

[134] Boscawen, 1890, p. 96. See also Bonavia, 4/5 (1890), p. 117; and Bonavia, 1894, p. 86.

[135] Bonavia, 4/4 (1890), p. 96; and p. 94 for further confirmation of this point.

The obvious and immediate appeal of the aspergillum theory is that it explains the genies' activity represented in fig. **1** as well as in fig. **2**.

Bonavia maintained throughout all of his articles that the AST seen in fig. **2** is a conventionalized representation of a date palm. According to his aspergillum theory, the 'tree' seen there is being purified, not fertilized.

> The sacred tree and genius Dr. Tylor would perhaps interpret as representing the act of fertilizing the female trees, which have no fruit yet, but only female *flowers*. But that same sculpture would admit of a different interpretation viz. the ceremony of *blessing* the grove before it bore fruit, with the expectation that a plentiful grove might result in the coming season.[136]

Interpreted in this way, fig. **2** is a scene of purification, performed by mythical beings ('invisible guardian angel[s] protecting the palm trees and king').[137] Since the 'cone'-holding figure is 'always' winged, the event therefore 'appears to have a spiritual meaning connected with desire for protection of [the] date crop.'[138] Bonavia, like Tylor, saw in this composition a mythic cultic event; unlike Tylor, however, he understood the meaning of the genies' activity as extraordinary, and in no way mundane.[139]

Tylor was most concerned with finding an explanation for the genies' instruments and activity, illustrated primarily in fig. **2**, whereas Bonavia was most concerned with explaining the genies' instruments and activity in multiple and different cases where the 'cone' and bucket appear. This led each to arrive at a different explanation for the activity performed by the genies around the AST, and to a different solution regarding the question of pre-iconography for the 'cone' and bucket.

For Count d'Alviella, Tylor's interpretation of the AST and genies as a mythical representation of the artificial fertilization of a date palm grove was entirely acceptable. However, d'Alviella had noted, along with Bonavia, the weak link in Tylor's theory.[140]

> I consider that Mr. Tylor has thoroughly grasped the primitive and somewhat material meaning of the subject handled in his essay [Tylor, 1890]. I have, however, already had the occasion to show that, amongst the Assyrians, this

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[136] Bonavia, 4/3 (1890), p. 68 (emphasis his).

[137] Bonavia, 4/4 (1890), p. 94.

[138] Bonavia, 1894, p. 79.

[139] Bonavia, 4/4 (1890), p. 96, 'All these figures and whatever they may be doing, appear to have a *spiritual* meaning, . . . and not that of any operation done by ordinary men. . . . [W]e must suppose that the use of holy water, sprinkled by means of the holy cedar cone, was a part of the machinery of Assyrian priest-craft. . . . [T]he priests . . . might have taken up the idea (of cleansing and renovating waters for the body) and developed it into a ceremony for religious purposes, and so the notion was handed down to us. . . .' (emphasis his).

[140] See d'Alviella, 1894, pp. 146–47, where he discussed Bonavia's cone and bucket theories appearing in Bonavia's *Babylonian and Oriental Record* articles.

> subject had above all a symbolical acceptation.[[141]] It must be remembered that they could not attach to the cultivation of the date-palm the same importance as the inhabitants of Lower Chaldæa. In fact, though the palm grows in Assyria, the date does not ripen there. They must therefore have seen in this figured representation something else and something more than the artificial fertilization of the palm.[142]

In response to this problem, d'Alviella used Tylor's fertilization theory as the basis for his own interpretation that every scene that included a genie, bucket and 'cone' represented a metaphor for generalized reproduction. D'Alviella's explanation of general reproduction or fecundity stands in contrast to Tylor's own specific interpretation of artificial fertilization. However, in order to address the issue of (non)fruiting date palms in Assyria, and still hold on to Tylor's fertilization theory, d'Alviella found himself having to go beyond Tylor's specific explanation.

> May we not go further, and inquire if this process [of fertilization] might not have supplied a symbol of fertilization *in general*, a symbolical representation of the mysterious operation everywhere performed, under the most different forms, by the fertilizing forces of Nature? . . . In short, the Assyrians seem to have drawn from the sexual relations of plants, or, properly speaking, of the palm, the same symbolism, relating to the renewal and communication of life, as did other nations from human sexuality. It is, moreover, quite conceivable that the inflorescence of the date-palm may have performed the symbolical function which elsewhere devolved upon the *phallus*, as the pre-eminent emblem of the fertilizing force. As for the palm, it naturally became, in this order of images, the symbol of generative nature, or, to be more exact, of the Universal Matrix.[143]

The result of 'going further' than Tylor's fertilization theory meant interpreting the AST, genie, 'cone' and bucket in conceptual terms. Hence, the AST represented a symbol of a concept, that is, the concept of reproduction or fecundity, and the genies (their instruments and activity) represented the fertilizing force in nature.

D'Alviella argued that all floral figures appearing together with the genie, 'cone' and bucket represented symbols of nature and reproduction—and not specific trees or plants. He therefore interpreted fig. **17** as simply symbolic of the life-giving forces of nature.[144] And though he considered the AST in fig. 2 as representing a conventionalized date palm, he did not refer to it in such specific terms as Tylor or Bonavia had done. Rather, he referred to it as a general symbol of fecundity. D'Alviella's interpretations do not address pre-iconographical or iconographical questions, such as, for instance, does the AST represent a tree, a specific mundane tree (e.g., a date palm) or a specific sacred tree (e.g., 'tree of life')? Instead, his interpretations encourage understanding the AST on a symbolical level, with the understanding that multiple superimposed layers of meaning were embedded in the AST-and-genies composition.

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[141] D'Alviella, 'La fécondation artificielle du palmier dans la symbolique assyrienne,' *Bulletins de l'Académie royale de Belgique* 20 (1890), pp. 359–74.

[142] D'Alviella, 1894, p. 149.

[143] Ibid., pp. 150–51 (emphasis his). Prior to d'Alviella, see Baudissin, 1878, p. 190, who also wondered if the 'cone' was a phallic symbol, 'Eine Art Pinienzapfen (ein phallisches Symbol?). . . .'

[144] Ibid.

By 1894, just four years after Tylor had published his fertilization theory, the terms of the debate concerning the meaning of the genies' activity and instruments had been established. Clear distinctions in approach to this debate had emerged. This is made explicit in Bonavia's interpretation of the 'cone' and bucket as purifying instruments, Tylor's interpretation of them as fertilizing, and d'Alveilla's interpretation of them as (phallic) symbols of reproduction and fecundity. The participants in this debate openly questioned one another's conclusions. Consider, for example, Bonavia's response to d'Alviella's interpretation of the genies' activity around the AST.

> . . . are [we] forced to fall back, as d'Alviella suggests, on the abstract idea that the whole thing means fecundity—a phallic emblem—denoting *universal reproduction* [?] That there was phallic worship in ancient times is apparent enough, but it does not necessarily follow that *everything* had a phallic meaning.[145]

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[145] Bonavia, 1894, p. 77 (emphasis his). No subsequent scholar has referred to d'Alviella's phallic interpretation of the genie-and-AST composition, or proposed it as their own, or mentioned any of Freud's theories in connection with it. It would appear therefore that the phallic interpretation died with d'Alviella in the late nineteenth century.

PART II

The Date Palm Theory since 1900

7 Fertilization triumphant

The British Museum's sculptural holdings from ancient Iraq were first published in 1900 in the form of a museum guide, and this was followed in 1908 with a second, revised edition. In both of these volumes, which were edited by the philologist Ernest Alfred Wallis Budge, the activity taking place in the Nimrud reliefs seen in figs. **1–2** was described as 'fertilizing,' and the AST was identified as a 'date palm':

> Contains representations of the performance of religious rites in connection with the ceremony of fertilizing a date palm. . . . [see fig. **1**]
>
> Slab sculpted with an eagle-headed, winged figure performing the ceremony of fertilizing the date palm.[146] [cp. fig. **2**]

Budge followed Tylor's interpretations without attributing the ideas to Tylor.[147] While the structure of these museum guides did not allow for such attribution, this mode of disseminating information served Tylor's ideas well: at this early date Tylor's ideas appear as the accepted observation of experts.

August Henry Pruessner, a philologist who specialized in ancient Babylonian date culture, had accepted Tylor's ideas on the basis of what Budge had published. Pruessner wrote,

> That artificial pollination of the date palm was practiced during the period of the Assyrian Empire is certain from monumental evidence.[148]

Here, in a note, Pruessner simply cited the 1908 edition of the British Museum guide, identifying the 'monumental evidence' as our fig. **1**. This was

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[146] *A Guide to the Babylonian and Assyrian Antiquities, British Museum,* London, 1900, p. 20 (cat. no. 2), p. 19 (cat. no. 5). The same descriptions accompanied the same reliefs in *A Guide to the Babylonian and Assyrian Antiquities, British Museum*, 2nd ed. rev. and enlarged, London, 1908, pp. 21–22, cat. no. 2 (see pl. X) and cat. no. 5. However, in the 1908 edition of the guide, the caption to pl. X (=our fig. **1**) did not mention either 'fertilizing' or 'date palm': 'Bas-relief with two figures of Ashur-nasir-pal, king of Assyria from BC 885 to 860, attended by winged mythological beings and worshipping Ashur, the national god of Assyria, who appears within a winged circle above the sacred tree.'

[147] Tylor thanked Budge in the acknowledgments section of Tylor's 1890 article (p. 383, note). Presumably, Budge was quite familiar with Tylor's fertilization theory.

[148] A. H. Pruessner, 'Date Culture in Ancient Babylonia,' *American Journal of Semitic Languages* 36 (April 1920), p. 224 and n. 3.

Pruessner's only remark on the fertilization theory and on the identification of the AST as a date palm in an article otherwise devoted to understanding the cultivation of date palms from the cuneiform sources. His certainty regarding the AST as a date palm being fertilized does not arise from his own consideration of the imagery. Rather, it rests upon Budge's acceptance of Tylor's ideas concerning AST imagery, combined with Pruessner's own research into the artificial fertilization of date palms, which he argued was attested in Akkadian texts.[149] Pruessner assumed that the AST imagery illustrated the texts he had analyzed.

Tylor's fertilization explanation and his claim of similarity appear unsourced in Otto Weber's cylinder seal catalogue written during this period.[150] Weber's catalogue of approximately 600 ancient Near Eastern cylinder seals brought together examples from various collections in Europe and the United States, and more than one-third of these examples came from private and public German collections (particularly the Vorderasiatisches Museum in Berlin) that had not been previously published. His two-volume catalogue is based on a series of lectures he delivered in 1915 on the iconography of seals in which he grouped the seals primarily by subject matter and interpreted their meanings from myths and rituals that had been translated and discussed in general historical and cultural analyses of Mesopotamia. Weber's work, much like that of William Ward, is of particular interest to us for its emphasis on grouping cylinder seals according to subject matter.

Weber included the AST in his umbrella category 'tree of life,' which also included representations of the worship of actual trees and pole or column worship. In his analysis of these various examples, Weber discussed the meaning of the activity surrounding some ASTs seen on seals as well as those seen on the walls of Aššurnasirpal II's palace.

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[149] Pruessner focussed on several terms in order to prove that the artificial fertilization of date palms took place in Mesopotamia. See ibid., pp. 222–23, 228–29, for his understanding of '*arum*' and '*zinâtum*,' which he defined as 'blossoms' and as referring to the cultivation of the date palm. For these terms as they appear in 'responsibility clauses for gardeners,' see B. Landsberger, *The Date Palm and Its By-products according to Cuneiform Sources, Archiv für Orientforschung*, Beiheft 17 (1967), pp. 10–11. For more recent definitions of these terms, see A. L. Oppenheim et al., eds., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago,* vol. 1, pt. 2, *A*, Chicago, 1968, pp. 311–12, '*aru*': 'frond, leaf of the date palm'; and idem, *The Assyrian Dictionary of the Oriental Institute of the University of Chicago,* vol. 21, Z, Chicago, 1961, pp. 123–24, '*zinû*': 'midrib of the frond of the date palm.' See also J. Black et al., *A Concise Dictionary of Akkadian,* 2nd (corrected) printing, *SANTAG* 5, Wiesbaden, 2000, p. 25, 'aru(m)': 'branch, frond'; and p. 448, '*zinû*': 'rib of palm frond.' Pruessner also analyzed the term '*rakābu*': see his p. 225, 'some forms of *rakâbu* [i.e., the D-stem = *rukkubu*] were employed to designate the act of fecundation. . . .'; and p. 226, '"*rakâbu*," to pollinate. . . .' See chapter 10 below for a further discussion of '*rakâbu/rukkubu.*'

[150] See O. Weber, *Altorientalische Siegelbilde,* 2 Bde, Leipzig, 1920. Like E. A. W. Budge, Weber was a philologist with a curatorial (and later directorial) position in a museum with major Assyrian holdings.

> Kultischen Charakter trägt auch die von der großen Kunst der Assyrer besonders des 9. Jahrhunderts her wohlbekannte Szene der künstlichen Befruchtung der Dattelpalme durch einen geflügelten Genius. In dieser Szene wird ein Vorgang des täglichen Lebens ins Symbolische gesteigert und wie die Persönlichkeit des Gärtners, der zum Genius wird, so erfährt auch der Baum in seiner Umbildung zum Lebensbaum eine Steigerung seiner Art.[151]

Here Weber supported Tylor's view that the AST represents a date palm and that the genies are artificially fertilizing it. Continuing with Tylor's explanation, Weber claimed that we are witnessing a mundane event that has been elevated to a symbolic level and that just as the mundane gardener has been raised to the symbol of the genie, so has the date palm been raised to the symbol of the 'tree of life.' Weber managed to convey the better part of Tylor's ideas as facts, not by citing Tylor but by presenting Tylor's ideas as generalizations.

Walter Andrae referred to the AST in ways very similar to that of Tylor, even more so than Weber had done, yet still without mentioning Tylor as the source. In his catalogue *Coloured Ceramics from Ashur and Earlier Ancient Assyrian Wall-Paintings. From Photographs and Water-Colours by Members of the Ashur Expedition organised by the Deutsche Orient-Gesellschaft*, Andrae presented some of the wall paintings preserved at Kar-Tukulti-Ninurta that feature the earliest known representation of the AST (dated to the reign of Tukulti-Ninurta I, c. 1244–1208 BC).[152] In his description of fig. **18** (see detail), Andrae wrote,

> Of the middle piece, which seems to be on a red ground, there is a small strip only 5 centimetres high, containing pictures of bird-headed, winged mythological figures, in the attitude of palm-tree fertilizer, probably holding in their hands the baskets in which they carry the male fruit-bearing plant. The figures are surrounded by rosettes, which are scattered over the background either with a symbolic intention or simply to fill up space. The two remaining figures stand, one on a red, the other on a blue ground, which has now partly peeled off. The right-hand one, on blue, is surrounded by branches of palm leaves; the other stands in front of a palm tree, surrounded by branches like the well-known early Assyrian so-called *tree of life,* which is built up from the line at the base with this 'branch' work. We have here the earliest example so far found of this remarkable form. The mythological creature on the left, his bird-head turned to the left, is still complete, down to part of the white leg. The basket is not clearly preserved. His loin

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[151] Idem, Bd. 1, p. 119.

[152] This catalogue was edited by Andrae and published in London, 1925. See pp. 11–20 and pls. 1–5 for Andrae's discussion of the Kar-Tukulti-Ninurta wall paintings. Walter Bachmann painted the watercolor reproduced as our fig. **18**; Andrae noted (pp. 13–17) that Bachman reconstructed a good deal of this composition.

> cloth was blue and red above the girdle, and white below, perhaps fringed. Both the wings depicted are exactly like those of the many early Assyrian mythological figures, one slanting up, the other hanging down. The feathers are alternately white and red. The wings of the right-hand figure are just the same, but much more is lacking.[153]

Fig. **18** is only very partially preserved (the artist's reconstruction appears lighter than the preserved parts). The drawing of the detail shows the darker outline of the preserved image, and how difficult it is to fully determine how the 'arbor' meets up on the right-hand side, as well as which type of AST is represented. Andrae most likely based his impression of this AST and this scene on Aššurnasirpal II's reliefs. This is apparent from his understanding it as the 'earliest example so far found [of] . . . the well-known early Assyrian so-called *tree of life*.' His reconstruction of both genies' gesture as fertilizing, and their hand-held instrument as buckets filled with date spadices, is based on Tylor's interpretations of Aššurnasirpal II's wall reliefs. Andrae assumed that the small bit of AST preserved at left represented a palm. It is impossible to tell what type of 'tree' is represented here; but it is possible to determine that this 'tree' is probably an AST-type. That Andrae calls it a 'palm' follows directly from Tylor's interpretation that all ASTs represent date palms.

Unlike Weber's catalogue, Andrae's catalogue has notes. Andrae omitted Tylor's article from his notes yet still paraphrased Tylor's ideas in the main body of his text. This would suggest that the fertilization theory now stood on its own as self-evident.

We might think that Weber and Andrae had presented Tylor's ideas as objective because their publications, being catalogues, are of a general nature. However, Tylor's ideas also appear unsourced in an article specifically devoted to reviewing the fertilization theory. This appears to be a case where Tylor's ideas were so closely associated with him that it seemed unnecessary to cite him.

> The well-known Assyrian bas-relief [our fig. **2**] representing the Sacred Tree and a winged figure, exhibits details which are explicable on the two hypotheses: (1) that it depicts a temple scene or mystery-play, and (2) that the mystery itself was the ritual enactment of the great yearly festival of the fertilization of the date-palm. . . . As regards the winged figure, the satchel and the pollen-mass need no explanation.[154]

In this article, the botanist Constance Garlick's objective was to review the facts concerning artificial fertilization of date palms, including how it was currently performed. She slotted this information between, at one end, a summary of Tylor's claim of social significance and, at the other end, his claim of formal similarity. Garlick also alluded to climate conditions in the north as unfavorable to the growth of date palms. In her view, this did not present an obstacle to the fertilization theory.

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[153] Ibid., p. 16, and pl. III (=our fig. **18**) (emphasis his).

[154] C. Garlick, 'Notes on the Sacred Tree in Mesopotamia,' *Proceedings of the Society of Biblical Archaeology* 40 (June 1918), pp. 111–12. See our fig. **38** for Garlick's drawn version of our fig. **2** (which she has labelled as her own 'fig. 2').

> Presumably the temple rite in question [depicting the artificial fertilization of a date palm as in fig. **2**] was an ancient inheritance from the older Babylonian religion, grafted on to the Assyrian State religion, for the date-palm as a source of food was of supreme importance to the Babylonians—dwellers on the sandy river plain—but far less so to the Assyrians of the hilly district of the North.[155]

This kind of interpretation asserted that the importance of the date palm in the north, indicated by representations of the AST as a date palm being fertilized, was inherited from the south. Such an interpretation assigned an inherently abstract (i.e., 'symbolic') meaning to the AST and associated activity of the genies, since date palms could not have any agricultural/economic importance in an Assyrian climate.

The fact that Garlick did not cite Tylor in connection with his ideas has an interesting consequence. When the archaeologist and iconographer Henri Frankfort came to discuss the fertilization theory twenty years later, he cited Garlick, and not Tylor, as his source.[156] Felix von Luschan, on the other hand, had enunciated Tylor's ideas and attributed them to Tylor. Regardless, von Luschan's article became equated with Tylor's ideas, and von Luschan was later cited in lieu of Tylor. These are instances of how a growing group of scholars are cited as sources for the fertilization theory, thereby lending it ever greater authority.

By the beginning of the twentieth century, the ethnographer and archaeologist von Luschan had found Tylor's fertilization theory so convincing that he had reproduced significant parts of Tylor's arguments and images in his own article. These included: the quotes from Herodotus, Theophrastus and Pliny outlining knowledge of separately sexed date palms and artificial fertilization; the comparison between the genies' 'cone' and a hand-held male date spadix using Tylor's original images (our figs. **4–6**); and a summary of AST-types that represent date palms being fertilized, again using Tylor's images (our figs. **13**, **17**).[157] In sum, von Luschan reproduced more than half of the images Tylor had used to illustrate his argument for artificial fertilization in 1890.[158]

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[155] Ibid., p. 111.

[156] See Frankfort, 1939 (1965), p. 204, n. 1.

[157] See F. von Luschan, 'Entstehung und Herkunft der ionischen Säule,' *Der Alte Orient* 13 (1912), pp. 25–30, Abb. 24 (=Tylor, 1890, fig. 15), Abb. 25 (=Tylor, 1890, fig. 14), Abb. 26 (=Tylor, 1890, figs. 5–7), Abb. 28 (=Tylor, 1890, fig. 19). Von Luschan described our figs. **13** and **17** as 'fertilizing genies' and 'fertility genies' and our figs. **4–6** as 'hands [holding] a male date palm flower cluster.' See pp. 25–26, where von Luschan specifically named Tylor and identified him with the fertilization theory,

Von Luschan's use of Tylor's images found its way into a subsequent book on the cultural history of the Babylonians and Assyrians by the philologist Bruno Meissner. There, in a chapter on agriculture, Meissner reviewed some of the evidence supporting ancient knowledge of artificial fertilization of date palms. Like Pruessner, Meissner focussed on select texts using visual material as illustrations, assuming that the texts corresponded to the images. In particular Meissner cited words appearing in the Code of Hammurabi that proved to him date palms were artificially fertilized.[159] Additionally, he quoted Herodotus (1.193). To illustrate these texts he reproduced several of Tylor's original figures (i.e., our figs. **4–5**), where Meissner argued that the 'cone' represented a hand-held male date spadix, and our fig. **13**, where Meissner argued that genies 'pollinate' a cone-type AST.[160] Meissner attributed these images to von Luschan's article, with no mention of Tylor.

> Die Erkenntnis der Zweigeschlechtigkeit der Palmen, die hier den Griechen zugeschrieben wird, war natürlich auch von den Babyloniern längst erkannt, und ihre künstliche Befruchtung erschien ihnen als ein so wichtiger Vorgang, daß diese von Genien der Fruchtbarkeit vorgenommene Prozedur in symbolischer Weise, besonders sogar in der assyrischen und hethitischen Kunst, trotzdem die Datteln in diesen Gegenden doch kaum noch reiften, dargestellt worden ist (s. Abb. 45 and Taf.-Abb. 83–84).[161]

'Die Orientalisten kennen schon lange assyrische Reliefs [e.g., fig. **13**]. . . . Man hat sie in früherer Zeit völlig mißverstanden und allerhand mystisches Zeug in sie hineingeheimnißt. Wir wissen heute, seit der eingangs erwähnten Studie E. B. Tylors, daß der mystische "Lebensbaum" ganz einfach eine Dattelpalme ist, die von Dämonen befruchtet wird, genau so, wie noch heute überall in Ägypten und im Zweistromland die Dattelbäume künstlich von Menschen befruchtet werden müssen, wenn sie eßbare Früchte liefern sollen.'

[158] In addition to those cited in our text, von Luschan reproduced Tylor's images of genies with cones and buckets in support of the fertilization theory; see ibid., pp. 28–29, Abb. 27 (=Tylor, 1890, figs. 1–4). Von Luschan added to these images one from Sakçgözü, a Neo-Hittite relief of two figures standing on either side of an AST, with a winged disk overhead. Associated with this relief is another slab showing a genie holding a bucket and 'cone' (see ibid., p. 25, Abb. 23).

[159] See B. Meissner, *Babylonien und Assyrien,* Bd. 1, *Kulturgeschichtliche Bibliothek*, Heidelberg, 1920, p. 205. From Hammurabi's code, Meissner defined the word *rukkubu* as 'fertilized' occurring in Laws 64-65 (or laws XVI, 61, 72 and XVII, 8). Pruessner and Meissner appear to have independently arrived at a similar conclusion regarding the meaning of this term, as well as its connection with AST images.

[160] See Meissner, 1920, Taf.-Abb. 83–84=von Luschan, 1912, Abb. 26 (=Tylor, 1890, figs. 5–6); Meissner, 1920, Abb. 45=von Luschan, 1912, Abb. 24 (=Tylor, 1890, fig. 15). Meissner described our fig. **13** as 'genies fertilizing a date palm,' and our figs. **4–5** as 'hands [holding] a male date palm flower cluster.'

[161] Meissner, 1920, p. 205.

The 'Hittite art' Meissner referred to must be the Sakçagözü relief illustrated by von Luschan, which von Luschan had compared with Assyrian images featuring the genies and AST. Like Garlick, Meissner noted unfavorable climate conditions for date-growing in Assyria and similarly settled the issue by interpreting the Assyrian imagery as a symbolic version of actual activity that took place south of the Assyrian royal capitals.[162]

Von Luschan's use of Tylor's images also found its way into one of William Foxwell Albright's articles where Albright, a Biblical archaeologist writing about the cherubim appearing in Genesis 3.24, claimed that

> . . . the *kerûbîm*, who guard the tree of life, are unquestionably the winged genies of fecundity who fertilize the female date palm in Assyrian sculptures. . . .[163]

In this sentence the key words '*kerûbîm*,' 'tree of life,' 'genies,' 'fecundity,' 'fertilize,' 'female date palm,' and 'Assyrian sculptures' capture Tylor's fertilization theory and Biblical claim quite well. Albright cited von Luschan, not Tylor, referring to the numerous illustrations that von Luschan had reproduced in his article.[164] Having summarized Tylor's arguments using Tylor's images, von Luschan's piece seemed to stand for Tylor, 1890.

The extent of the close-knit relationship between von Luschan and Tylor is summed up by Andrae, who referred to the fertilizing explanation of the activity around the AST as 'die Tylor-v. Luschansche Deutung der "Befruchtungsgeste."'

> Ich halte entgegen widersprechenden Erklärungen die Tylor-v. Luschansche Deutung der 'Befruchtungsgeste,' welche die assyrischen Flügelwesen am Palmettbaum und am Könige vollziehen, für die richtige und einzigmögliche.[165]

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[162] But see discussion in the notes of chapters 8 and 9 below concerning climate conditions where Meissner, 1920, p. 203, questioned how far north date palms may have fruited.

[163] W. Albright, 'The Goddess of Life and Wisdom,' *American Journal of Semitic Languages* 36 (July 1920), p. 282.

[164] Ibid., p. 282, n. 3: 'see the illustrations in von Luschan, [1912]: 26ff.'

[165] Andrae, 1933, p. 49, where Andrae supported a symbolic fertilization explanation, 'Gibt man sie zu, so ist die auf die Handlung bezogene Gleichsetzung von König und Palmettbaum, die sich hier ausdrückt, für uns von ausschlaggebender Bedeutung. Man muß sie so lesen: "Der König als Lu-gal, als der 'Große Mensch,' als höchstes lebendes Menschenwesen, wird von göttlichen Wesen 'befruchtet,' und der Palmettbaum, als Bild der zeugenden Menschenkräfte, wird von ebendiesen göttlichen Wesen befruchtet." Das bedeutet natürlich nicht, daß der Palmettbaum den König darstellt, sondern daß der Mensch hier erfaßt ist als Erscheinung und als Wesen, das eine Mal in der Person des lebenden Königs, das andere Mal in der "abstrakten" Gestalt eines baumähnlichen Symbols.' However, previously Andrae, 1925, p. 16, had described genies gesturing at the AST 'in the attitude of the palm-tree fertilizer.'

Here, and in a note, Andrae remarked that von Luschan had followed Tylor in this regard.[166] Then why did Andrae provide a citation of von Luschan's article, but not Tylor's? Impossible as it is to know the motivation, the effect is obvious. Tylor's theory and claims had been successfully transplanted and were now associated with other scholars. Such a general acceptance of Tylor's ideas, attributed to him and others, carried with it an authority that could and did dismiss any worries that the theory and/or claims could be wrong.

A dismissive attitude towards questioning the fertilization theory is illustrated in cases where scholars explicitly state that Tylor's theory and identification of the AST as a date palm must be correct, with no further comment. For example, just after Budge had published the first British Museum's guide to the Babylonian and Assyrian antiquities, Sayce published an article in which he declared that Tylor's conclusions regarding the claim of similarity and the fertilization theory had (now) been accepted.

> . . . Professor Tylor has made it clear that the tree was a conventionalised attempt to picture the palm. . . .[167]

As a footnote to this Sayce wrote,

> Professor Tylor shows that the winged genies, as well as Ea, are depicted impregnating the female palm, the male inflorescence being held in one hand and the bucket containing the supply of pollen in the other.[168]

Soon thereafter, Budge edited a British Museum catalogue of the reliefs from Aššurnasirpal II's palace and cited Tylor in his introduction, treating Tylor's ideas as 'wellnigh certain.'

> The scenes on a considerable number of the largest bas-reliefs appear to represent a kind of nature-worship, the full religious significance of which it is, at present, impossible to explain. The half-human figures, whether man-headed or eagle-headed, or two-winged or four-winged, seem to be of divine rank. . . .The 'sacred tree' by which they are so often seen standing is, no doubt, the date-palm treated conventionally. In ancient times, as in modern, the date-palm produced the staple food of the country and, as Herodotos says (i. 193), supplied the natives with 'bread, wine and honey.' It is certain from the testimony of ancient writers that the palm-tree was carefully cultivated in Mesopotamia and Egypt, and that the process of the artificial fertilization of the palm was well known to the natives of both countries. The facts about

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[166] Ibid., p. 49, n. 1, 'Auf sie weist von Luschan unter Bezugnahme auf Tylor mit besonderem Nachdruck hin: "Die ionische Säule," s. 25ff.'

[167] Sayce, 1909, p. 543.

[168] Ibid., p. 543, n. 1.

> the subject published by Prof. E. B. Tylor—see *Proc. Soc. Bibl. Arch.*, vol. xii (1890), pp. 383 ff.—prove it to be wellnigh certain that the scenes on the bas-reliefs, in which the king and the winged figures hold palm-spathes and pollen baskets, really represent the ceremonial fertilization of the palm.[169]

In these opening pages to his catalogue, Budge had summarized Tylor's theory and claims of similarity and social significance to support a date palm identification for the AST appearing on Aššurnasirpal's walls. Not only that, but Budge also based his descriptive captions on Tylor's ideas: each British Museum relief that featured the AST and/or genies was described in Budge's catalogue as a 'date palm' or 'palm-tree' 'being fertilized.'[170]

In such a culture of nonquestioning acceptance, it seems remarkable when an alternative view is introduced. Following Budge's catalogue of Aššurnasirpal's reliefs, the third edition of the British Museum Guide to the Babylonian and Assyrian antiquities appeared in 1922, again edited by Budge. In the third edition, the aspergillum interpretation was presented alongside the fertilization theory.

> Two interpretations of the scene . . . depicted [in fig. **1**] are possible:— 1.) That the king is performing a ceremony in connection with the fertilization of the date-palm, and that the object held in the right hand of the second figure is the spathe from the male tree. This interpretation was proposed by the late Prof. E. B. Tylor. 2.) The analogy of other slabs, e.g. 24 [=our fig. **19**], suggests that the priest is performing a ceremony of anointing on the *king*, and not on the tree. It is known from ritual texts in the British Museum from the Library of Ashur-bani-pal, that the anointing of the king was a prescribed ceremony. . . . The object in the priest's right hand is no doubt a cedar cone. . . . The scene sculptured on this slab represents an act in a sacred play.[171]

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[169] See E. A. W. Budge, ed., *Assyrian Sculptures in the British Museum, Reign of Ashur-nasir-pal, B.C. 885–860*, London, 1914, pp. 6–7.

[170] See ibid., p. 11 (to accompany pl. XI), 'In the centre is the "sacred tree," i.e., a conventionalized form of the date-palm, and above it a winged disk, within which is the figure of the god Ashur. On each side of the tree is a figure of Ashurnasirpal, who is performing some religious rite in connection with the ceremony of fertilizing a date-palm. . . .'; p. 17 (to accompany pls. XXX and XXXII), '. . . a winged being . . . holds in his hands objects used in connection with the ceremony of fertilizing the date-palm [or 'palm-tree']'; p. 18 (to accompany pl. XXXIII), '. . . a winged being . . . holds in his hands objects used in connection with the ceremony of fertilizing the palm-tree'; p. 19 (to accompany pls. XXXVIII, 2, XXXIX, 2, XL), '. . . winged being in the character of fertilizer of the date-palm'; p. 20 (to accompany pl. XLII, 2), 'The "sacred tree," or conventional representation of the date-palm . . . ,' (to accompany pl. XLIII), '. . ."sacred tree," or date-palm,' (to accompany pls. XLIV–XLVII), '. . . winged being(s) in the character of fertilizer(s) of the palm-tree, [or 'date-palm'] . . .'; p. 21 (to accompany pl. XLVIII, 2), 'Winged being in the character of fertilizer of the palm-tree.'

[171] Budge, ed., *A Guide to the Babylonian and Assyrian Antiquities, British Museum*, 3rd ed., rev. and enlarged, London, 1922, pp. 43–44 (emphasis his).

This is unique for early twentieth-century scholarship: not only is it acknowledged that genies appear together with their instruments in scenes other than those involving the AST (as in fig. 19), but it is argued that these examples should be used as analogies to reexamine the meaning of the scene in fig. 1. The idea that the genies' gesture represents anointing with a cedar cone recalls the combined earlier arguments of G. Rawlinson, Lenormant, Boscawen and Bonavia. The final remark, that fig. 1 represents an act in a sacred play, recalls Garlick's description of fig. 2 as depicting a 'temple scene or mystery-play.' This idea, that what we see before us in figs. 1–2 represents an actual cultic performance, finds sympathy with later views that the AST appearing on cylinder seals represents a cultic scene performed on a regular basis in the temples (see chapter 14). The implication of the 'sacred play' interpretation is that these scenes represent actual figures (understood as 'priests' wearing costumes) holding actual instruments, actually administering to the king and/or AST. The logical conclusion to be drawn from this is that the ASTs depicted in such scenes are actual objects and resembled quite closely what we see depicted on the reliefs and seals.

This reappraisal of the aspergillum (or 'anointing') interpretation did not have much impact on subsequent scholarly interpretation. Consider, for example, Eckhard Unger's entry for 'Lebensbaum' in the *Reallexikon der Vorgeschichte*, where he cited that third edition of Budge's guide in support of a fertilization explanation for fig. 1.

> Ein vorzügliches Beispiel der Befruchtungszeremonie selbst bietet das Relief Assurnassirpals II. (Nimrud Gallery 2 = *Guide to the Bab. Assy. Antiq.*^{3}, Tf. 14 [= our fig. 1]). . . .[172]

We just saw that the aspergillum interpretation was presented alongside the fertilization interpretation in the third edition of the guide, so presumably Unger (an archaeologist) must have seen it too. Yet he did not mention the aspergillum idea in any way: as probable, as improbable, as anything.

In other disciplines, such as botany, Tylor's fertilization theory met with support in the early twentieth century. We may recall that Bonavia, a nineteenth-century botanist specializing in date palms in India, had found much to disagree on with Tylor. He had objected to the fertilization theory on the basis of climate conditions in Assyria and on his close analysis of the genies' instruments appearing on Assyrian reliefs. With the exception of Constance Garlick, most scientists evaluating the fertilization question in the early twentieth century did not consider the climate question, nor did they evaluate the visual material. Instead, most of them found Tylor's theory convenient for demonstrating that knowledge of plant sexuality and practice of artificial fertilization could be dated to the earliest civilizations. In their eagerness to establish these as concurrent events, experts in the fields of botany and history of science adopted Tylor's theory and claims, using the first-millennium BC Assyrian reliefs as proof.

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[172] E. Unger, 'Lebensbaum,' *Reallexikon der Vorgeschichte*, Bd. 7, Berlin, 1926, p. 262.

Paul Popenoe, a botanist specializing in date palms worldwide, was responsible for introducing many varieties of palm into the United States in the early twentieth century. His research into the history, cultivation, and uses of the date palm, and on varieties of the date palm worldwide, was written up in 1924.[173] Acknowledged by his peers as an expert on the date palm, he is still cited today by historians and philologists working on Mesopotamian agricultural issues.[174]

In his first chapter on the 'Old World' history of the date palm, Popenoe noted that the date palm would have 'held a peculiarly important relationship to primitive date-growers' because of the 'intense interest to the primitive mind in the separation of its sexes on different plants.'[175] In emphasizing the importance of date palm reproduction to ancient Near Eastern cultures, Popenoe claimed that the date palm

> came to symbolize the creative force of nature, and to become in some cases the object as well as the symbol of worship. It gradually became identified with the primitive Semitic goddess . . . who particularly symbolized the creative force of nature.[176]

Popenoe attributed this symbolic meaning of the date palm to the philologist George Barton, who had put forward this interpretation in 1902.[177]

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[173] See Popenoe, 1924 (1973). Popenoe's manuscript, having been rejected by publishers due to the cost of reproducing photographs, lay in a file drawer until its rediscovery and publication in 1973. The 1973 published version is exactly the way Popenoe had left it in 1924.

[174] Popenoe, 1924 (1973) has been cited as an expert on the date palm by philologists, e.g., J. N. Postgate, 'Palm-Trees, Reeds and Rushes in Iraq Ancient and Modern,' in M.-Th. Barrelet, ed., *L'archéologie de l'Iraq du début de l'époque néolithique à 333 avant notre ère: perspectives et limites de l'interprétation anthropologique des documents, Colloques internationaux du CNRS (Centre national de la recherche scientifique)*, no. 580, Paris, 13–15 juin 1978, Paris, 1980, p. 100 (and n. 4); M. P. Charles, 'Onions, Cucumbers and the Date Palm (An introduction to the cultivation of Alliaceae, Cucurbitaceae and fruit trees in modern Iraq),' *Bulletin on Sumerian Agriculture* 3 (1987), pp. 1–2, 20; and W. G. Lambert, 'The Background of the Neo-Assyrian Sacred Tree,' in S. Parpola and R. M. Whiting, eds., *Sex and Gender in the Ancient Near East. Proceedings of the 47th Rencontre Assyriologique Internationale, Helsinki, July 2–6, 2001*, part 1, Helsinki, 2002, p. 325 and n. 6.

[175] Popenoe, 1924 (1973), p. 6.

[176] Ibid.

[177] See G. A. Barton, *A Sketch of Semitic Origins*, New York and London, 1902, passim. Barton was professor of Semitic languages at Haverford, Bryn Mawr and University of Pennsylvania, in addition to being director of the American Schools of Oriental Research in Baghdad. Most of Barton's research was concerned with Biblical subjects, but he also

Both Popenoe and Barton were writing in an American environment; and their views make it clear that the ideas of d'Alviella and Tylor had crossed the Atlantic.

Popenoe quoted Sayce's interpretation and translation of *CT* 16, 46 (featuring the *kiškānû*) to demonstrate that a palm cult had existed in Mesopotamia whose 'earliest records show it centered at Eridu.'

> Here . . . there was a famous oracle-tree, known as the Tree of Life, whose position in a garden near the town marked the center of the world. This tree was a date palm. A fragment of an old hymn has been preserved, which tells something of this institution:
>
> 'In Eridu a palm-stem grew overshadowing: in a holy place did it become green. . . .'
>
> As the translator, Sayce, explains, 'The sacred tree whose branches reached the heaven while its roots were nourished by the primeval deep was the tree which supported the world. It was emphatically a "Tree of Life" and is accordingly represented time after time on the monuments of Babylonia and Assyria.'[178]

We may recall from chapter 1 the ways in which Sayce had translated '*kiškānû*': as a palm, as the 'tree of life,' as the AST featured on Aššurnasirpal II's reliefs. Sayce's ideas had found their way into a botanist's brief history of the date palm primarily because they support the basic idea that the date palm was an important symbol of Mesopotamia. Popenoe was concerned with demonstrating that knowledge of the separation of sexes on different trees and artificial fertilization of date palms would have been known in ancient Near Eastern cultures because the date palm held such a significant position in these cultures.

Based on the interpretations of Sayce et al., Popenoe was convinced that the date palm and AST were one and the same. Note in the following how 'sacred palm' simply meant an AST to Popenoe.

> In general, the sacred palm was used in the interior decoration of temples, on city gates, royal vestments, seal cylinders, and anywhere else that the ingenuity of the artist could bring it in. Tylor suggested that artificial pollination is symbolized here.[179]

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worked in Assyriology and published translations of, e.g., Gudea cylinders A and B and inscriptions of Sumerian and Akkadian kings, as well as theorizing on the grammatical development of Old Babylonian.

[178] Popenoe 1924 (1973), p. 6 and n. 12. See also p. 11, 'the Tree of Life [existed] in the Babylonian sanctuary at Eridu.'

[179] Ibid., p. 7, and see n. 14, where Popenoe cited Tylor's 1890 articles in both *Nature* and *Proceedings of the Society of Biblical Archaeology*.

Here Popenoe presented Tylor's fertilization theory as a 'suggestion.' In his only other reference to Tylor and ASTs later on in chapter 9, Popenoe wrote that

> . . . from an early time, man must have seen the desirability of pollinating the female palm by hand, thus ensuring a better crop and, after systematic cultivation was begun, being able to dispense with the labor of caring for so may drones. As pointed out in Chapter I, the practice of pollination is clearly shown on the Assyrian monuments.[180]

So in chapter 1 Tylor's theory was a 'suggestion,' but by chapter 9 it had been 'clearly shown.' One suspects this was because the subject of chapter 9 was the male palm and pollination, and Tylor's theory neatly wrapped up the question as to whether 'Babylonians' and 'Assyrians' had knowledge of artificial fertilization.

Where Popenoe had devoted two sentences to Tylor's fertilization theory, George Sarton, the American historian of science, devoted an entire article to it.[181] Like Popenoe, Sarton also wanted to demonstrate the great antiquity of empirical knowledge of plant sexuality and artificial fertilization of date palms in order to

> draw attention to facts which have long been known to Assyriologists but have not been integrated into the history of botany.[182]

According to Sarton, the facts long known to Assyriologists were Tylor's theory and claims.

> The great English anthropologist Edward Burnett Tylor (1832–1917) was the first to suggest (in 1890) that [Aššurnasirpal II's reliefs] were symbolical representations of the artificial fecundation of the date-palm. Unfortunately the cryptic title of his paper 'The winged figures of the Assyrian and other ancient monuments' caused it to remain unknown to the very people who would have taken the keenest interest in them, namely the historians of botany.[183]

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[180] Ibid., p. 87. Note that Popenoe followed in the next paragraph with an enumeration of all the ancient Greek and Roman sources quoted by Tylor. See earlier, Popenoe, 1913, p. 101, 'Since the dawn of history, artificial pollination of the female date palm has been practiced in communities where its culture was commercially important. Bas-reliefs on the Assyrian monuments plainly show the operation.' (Here also Popenoe followed with an enumeration of all the ancient Greek and Roman sources quoted by Tylor.)

[181] G. Sarton, 'The artificial fertilization of date-palms in the time of Ashurnasirpal B.C. 885–860,' *ISIS* no. 60 (vol. 21/1) (April 1934), pp. 8–13. Sarton is known in the field as one of the most important figures in the history of science. He had founded the journal *ISIS* in 1912.

[182] Ibid., p. 8.

[183] Ibid., pp. 10–11, and n. 9.

Sarton presented the same evidence Tylor had in support of the fertilization theory. First, Sarton quoted each of the ancient Greek and Roman sources in full that refer to knowledge of separation of sexes and artificial fertilization of date palms; then he presented examples from Aššurnasirpal's palace featuring ASTs and genies holding buckets and 'cones'; and finally he reproduced Tylor's comparisons between an Assyrian 'cone' and male date spadices (our figs. 4–7).[184]

Our survey of the reception of Tylor's theory in the first third of the twentieth century has demonstrated that by the time of Sarton's article, Tylor's theory and claims had received a great deal of support. Sarton therefore had recourse to other scholars to support him in his own support of Tylor's theory. For example, Sarton reproduced two images (our figs. 1–2) from Budge's 1914 British Museum catalogue of the Aššurnasirpal palace reliefs 'with the original legends of Budge's publication.' We now know that Budge's legends described these scenes as date palms being artificially fertilized.[185] Though circular, this form of scholarly reinforcement appears to have helped Sarton to his views. For although Sarton admitted an alternative view existed (i.e., the aspergillum interpretation), and though he explicitly cited its adherents, Sarton dismissed this alternative as 'irrelevant.'

> Tylor's [1890] paper was soon discussed by Emmanuel Bonavia, W. St. Chad Boscawen, Terrien de Lacouperie and Count Goblet d'Alviella. Much of that discussion is irrelevant to our purpose, but the following points may be underlined. Goblet d'Alviella approved of Tylor's thesis and amplified it. According to him the Assyrians being thoroughly familiar with the artificial fertilization of the date-palm and conscious of its importance raised its ceremonial practice to the dignity of a general symbol of fertility. This theory is generally accepted in England and is summarized in Budge's preface to the British Museum publication of 1914 above mentioned.[186]

Sarton knew how strongly the archaeologist Léon Heuzey had stated the aspergillum interpretation in the Louvre catalogue of 1924 (analyzed below) but declared himself unimpressed by Heuzey's arguments.[187] Not that he wanted to believe Heuzey; Sarton was strongly motivated to support Tylor's fertilization theory, since he had his own interest in establishing that the 'Assyrians' knew that date palms are dioecious.[188]

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[184] For Sarton's summary of the ancient texts, see ibid., pp. 8–10; for reference to the Assyrian palace images, see ibid., p. 10, and pls. I–III; and for Tylor's comparison between an Assyrian 'cone' and spadices, see ibid., p. 11 and pl. 4.

[185] Budge, 1914, p. 11 (to accompany pl. XI = our fig. 1), 'In the centre is the "sacred tree," i.e. a conventionalized form of the date-palm, and above it a winged disk, within which is the figure of the god Ashur. On each side of the tree is a figure of Ashurnasirpal, who is performing some religious rite in connection with the ceremony of fertilizing a date-palm. . . .' Sarton, 1934 presented this image and legend in his article as pl. I. See also Budge, 1914, p. 20 (to accompany pl. XLIV = our fig. 2), '. . . winged beings in the character of fertilizers of the palm-tree. . . .' Sarton, 1934, presented this image and legend in his article as pl. II.

[186] Sarton, 1934, p. 11–12.

Sarton had been convinced by Tylor's reasoning, and now drew from certain 'facts' the conclusion that the AST represents a date palm being fertilized.

> I had often looked at the Assyrian bas-reliefs of the British Museum and pondered over them without formulating any conclusion in my own mind, until Tylor's paper came to my knowledge. Tylor's comparison impressed me deeply and I am now inclined to think his theory is true. Consider the following facts:
> (1) Immemorial knowledge of artificial fertilization.
> (2) Immense importance of the date-palm cultivation.
> (3) Striking likeness between the Assyrian cones and the male date-palm inflorescences.
> (4) Abundance of the Assyrian sculptures representing the 'fertility' rite. (Could another rite less immediately significant have obtained the same popularity?).
> If you put these facts together, does not the Tylor conclusion seem more plausible?[189]

The first two points may indeed be facts. We can ascertain from texts the knowledge that date palms are separately sexed trees and that large-scale cultivation of date palm groves took place. The last two points, however, do not represent facts. Rather, they represent interpretations of the visual material. We see Tylor's claims of social significance (Sarton's second point) and formal similarity (Sarton's third point) exerting their influence on Sarton's reasoning that the fertilization theory must be correct. And we see that Sarton matched textual evidence of the knowledge of artificial fertilization (Sarton's first point) with visual evidence of ASTs (Sarton's fourth point) in an attempt to resolve the meaning of the activity taking place in, for instance, figs. **1–2**. In other words, the debate had not evolved beyond the parameters Tylor had constructed forty-four years earlier.

The reason that a botanist and an historian of scientific thought saw nothing to challenge in Tylor's ideas is that they were primarily concerned with proving that artificial fertilization was known to first-millennium BC farmers living in Mesopotamia. They were not concerned with the fact that a range of similar images coexisted that could not all be explained as acts of artificial fertilization. That Sarton used fig. **2**, which shows the right-hand genie inserting his 'cone' into 'the very heart' of a palmette, as evidence for the fertilization theory—without thinking it necessary to discuss how this interpretation fits in with the scene depicted in fig. **1** (though he used both images in his article)—demonstrates the success of Tylor's presentation of the claims and theory as applied to fig. **2**.[190] And since Tylor's fertilization theory was accepted by experts such as Popenoe and Sarton, scholars now argued that the fertilization theory must be correct.[191]

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[187] Sarton (1934, pp. 12–13) mentioned Heuzey and his support for the aspergillum interpretation several times in the course of his discussion.

[188] This is clear from Sarton's general conclusions but also from his specific dismissal of the aspergillum interpretation: 'This view—the pine cone or cedar cone [i.e., aspergillum] view—does not interfere with the "sacred tree" idea (except that the tree may now be a conifer as well as a palm), but is inconsistent with the "sexual" idea.' (See ibid., p. 12.)

[189] Ibid.

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[190] Ibid., p. 10, '. . . in this case the eagle-headed genius introduces the object which he is holding in his hand *into* the flower: his intention of touching the flower and reaching the very heart of it cannot be mistaken' (emphasis his).

[191] See, e.g., Lambert, 2002, p. 325, 'That pollination is involved [in Aššurnasirpal II's reliefs] is now certain. Experts in the date palm accept is as self-evident. . . .' See p. 325, n. 6, where Lambert cited the 'expert' as Popenoe, 1924 (1973), p. 87, '. . . the practice of pollination is clearly shown on Assyrian monuments.' See also M. Eiland, 'Evidence for Pile Carpets in Cuneiform Sources and a Note on the Pazyryk Carpet,' in M. Eiland, Jr., R. Pinner and W. B. Denny, eds., *Oriental Carpets and Textile Studies,* vol. 4, *In Honor of Charles Grant Ellis,* Berkeley, 1993, p. 17, '. . . some feel that the evidence for the pollination of the palm in Assyrian sculpture is certain (Popenoe, 1913, p. 101, Popenoe 1924 (1973), p. 7). . . .' Further, see A. A. Bloch, 'The Cedar and the Palm Tree, A Paired Male/Female Symbol in Hebrew and Aramaic,' in Z. Zevit, S. Gitin and M. Sokoloff, eds., *Solving Riddles and Untying Knots, Biblical, Epigraphic and Semitic Studies in Honor of Jonas C. Greenfield,* Winona Lake, IN, 1995, p. 16, n. 13, where Bloch referred the reader to Eiland, 1993, pp. 16–17, 'for a description of the procedure of date palm pollination in Mesopotamian iconography.'

8 Resistance to the fertilization theory

Sarton had specifically referred to Léon Heuzey's arguments against the fertilization theory, which Heuzey had first published in a 1917 Louvre catalogue and which reappeared in a second edition of that catalogue in 1924.[192] Heuzey's discussion of the AST represents the strongest argument made against Tylor's theory in the twentieth century.[193] Before we turn to Heuzey's own words, let us remind ourselves of some of the main points made by those arguing against the fertilization theory in the nineteenth century and just at the turn of the century.

George Rawlinson had observed that the activity taking place in fig. **1** concerned pointing the 'cone' at the king. Rawlinson had regarded the genies as protectors and the bucket and 'cone' as instruments aiding in that protection.[194] Lenormant followed Rawlinson's line of thought, noting that some incantations called for the 'fruit of the cedar' to be held in front of a person for healing purposes.[195] Bonavia, who supported Rawlinson's and Lenormant's views that the 'cone' and bucket represent ritual instruments (e.g., an 'aspergillum' and metal bucket), also observed that in the various instances where the 'cone' and bucket appeared: '. . . when the cone is pointed towards the back hair of the king, or is pointed at the entrance of a city or temple, or palace, this [fertilization] theory loses all its force . . .'[196] Additionally, Bonavia observed that the 'cone' was pointed at different

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[192] See E. Pottier, ed., *Catalogue des antiquités assyriennes, Musée national du Louvre*, Paris, 1917, p. 49ff.; and idem, *Catalogue des antiquités assyriennes, Musée national du Louvre*, 2nd éd., Paris, 1924, p. 49ff. Sarton, 1934, p. 12, wrote, '. . . Bonavia held that the cone represented on the Assyrian monuments was not a date-palm inflorescence, but a cedar-cone used as an aspergillum, the bucket being then meant to contain holy water. This view . . . is strongly defended by Léon Heuzey in the catalogue of the Assyrian antiquities kept in the Louvre (1924).' S. Smith, 'The Relation of Marduk, Ashur, and Osiris,' *Journal of Egyptian Archaeology* 8 (1922), pp. 43–44, wrote, 'Tylor saw in the whole scene [e.g., our figs. **1–2**], in which certain figures are depicted, a ceremony derived from the fertilization of the date palm, but Heuzey has given good reasons for doubting this.' Sidney Smith cited Pottier's 1917 edition as his source. According to Pottier, 1924, p. 5, the second edition 'n'est qu'une réimpression de la précédente, parue en 1917, à laquelle j'ai ajouté quelques renseignements bibliographiques pour les livres parus depuis cette époque.' Therefore Smith and Sarton read the same arguments put forth by Heuzey.

[193] See also Stearns, 1961, pp. 70–71, who analyzed numerous AST and genie-bucket-cone compositions before deciding that Tylor's fertilization theory could not be correct. Stearns provided a different set of examples than Heuzey had, but he used the same method of analysis, and so to this extent basically reiterated Heuzey's conclusions.

[194] See G. Rawlinson, vol. 2, 1864, pp. 263–64. See also Rawlinson, vol. 1, 1885, pp. 359–60.

[195] See Lenormant, t. 1, 1880, pp. 83–85.

[196] See Bonavia, 1894, p. 74.

AST-types, and not just the type seen in figs. **1–2**: '. . . nor can we suppose that the genies are fertilizing the pomegranate tree [as seen in fig. **15**].'[197]

At the turn of the century, Pinches observed that the main problem with Tylor's theory was that the genies pointed the 'cone' at kings and winged bulls, in addition to ASTs. He thought that while the genies could be 'fructifying' the king (and ostensibly ASTs), they could not possibly be performing this same act on the bulls.

> An ingenious suggestion has been made to the effect that the genie with the pine-cone is represented in the act of fructifying the tree with the pollen (in an idealized form) from the flowers of another tree, just as it is necessary to fructify the date-palm from the pollen of the flowers growing on the 'male' tree. This, however, can hardly be the true explanation of the mystic act represented, as similar genies are shown on other slabs not only holding out the conical object as if to touch therewith the figure of the king, but also doing the same thing to the effigies of the great winged bulls. Of course, fructification of the king would be not only a possible representation to carve in alabaster, but one that we might even expect to find among the royal sculptures. The fructification of a winged bull, however, is quite a different thing, and in the highest degree improbable, unless the divine bull were a kind of representation of the king, which, though possible, is at present unprovable. This symbolic scene, therefore, remains still a mystery for scholars to explain when they obtain the material to do so.[198]

Pinches believed that it was possible to interpret figs. **1–2** using Tylor's theory, but since he could not summarily extend that interpretation to scenes involving the bucket, 'cone' and winged bull, he found the theory generally untenable. It is a serious problem for Tylor's theory that all scenes involving genies, bucket and 'cones' cannot possibly be explained as depicting acts of artificial fertilization. This problem with the fertilization theory becomes apparent only when one realizes how often the genies point the 'cone' at any number of different unfertilizable objects.

Heuzey probed this particular weakness of the fertilization theory in his own interpretations of the Neo-Assyrian reliefs housed in the Louvre. The reliefs he analyzed include three types of genies who hold a 'cone' and bucket and who stand alone; two types of genies who stand before the AST holding a 'cone' and bucket, and one genie who holds only a bucket and who stands alone.[199] Heuzey observed that these different compositions could not all be explained by the fertilization theory:

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[197] See Bonavia, 4/4 (1890), p. 92.

[198] Pinches, 1902, pp. 74–75.

[199] See Heuzey's entry in Pottier, 1924, pls. IX, 18; X, 21; XI, 23 (for the genies who stand alone); pls. II, 4; III, 5 (for the genies before the AST); pl. II, 3 (for the genie who holds a bucket and stands alone).

> D'abord, comme plusieurs autres figures nous le montreront, les mêmes génies, exactement dans la même attitude, sont souvent aussi représentés isolément, sans aucun rapport avec le mythe de l'arbre (nos. 3, 4, 18, 21, 23).[200]

Here Heuzey used examples of genies who hold the bucket and 'cone' and stand alone in order to show that bucket- and 'cone'-holding genies are not exclusively connected with AST compositions. One of these genies was excavated from Sargon II's palace at Khorsabad and originally stood at one of the court entrances next to a winged bull (figs. **20–21**). For Heuzey, as for Pinches, it was unacceptable to think that the Khorsabad genie was fertilizing a winged bull and that if the fertilization explanation did not suffice in this particular case, it would therefore not suffice in other cases.[201]

Heuzey also reiterated the observation concerning the king being an unsuitable subject for fertilization by genies; and the fact that if we take the 'cones' to be male date spadices, then by logical extension the AST-types seen in fig. **22** would represent male date palms, and surely we would not expect the genies to be artificially fertilizing a male tree.

> Il y a mieux: parmi les nombreuses scènes gravées sur le manteau d'Assournazirbal, dans une figure bien connue, c'est le roi en personne qui se tient debout entre les deux génies affrontés, tournant vers lui leurs cônes protecteurs. Faut-il ajouter qu'il y a une seconde forme de l'arbre sacré, où les palmettes sont remplacées par des cônes exactement semblables à l'attribut des génies? Ce serait, en conséquence, un arbre mâle; mais alors, quel besoin de le féconder?[202]

These various examples serve to show how different compositions and different AST-types do not fit Tylor's theory. However, like Pinches, and Bonavia before him, Heuzey did think the AST-types seen in figs. **1–2** and **22** represent trees. Heuzey distinguished between trees with palmettes and trees with cones, remarking that trees with cones would not have been fertilized like date palms. This suggests that he thought the AST seen in figs. **1–2** was like a date palm. His footnote to the above quotation confirms this view.

> Le plus logique serait d'admettre chez les Assyriens deux arbres sacrés, ayant pour prototypes dans la nature, l'un le palmier, l'autre le cèdre.[203]

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[200] Ibid., p. 52.

[201] See Stearns, 1961, pp. 70–71, who (later) made the same point.

[202] See Heuzey's entry in Pottier, 1924, p. 52. Nell Perrot later reiterated this point; see N. Perrot, 'Les représentations de l'arbre sacré sur les monuments de Mésopotamie et d'Élam,' *Babyloniaca* 17, Paris, 1937, p. 102.

[203] See Heuzey's entry in Pottier, 1924, p. 52, n. 2. See also p. 51, where Heuzey referred to the AST-type seen in figs. 1–2 as 'cet arbre symbolique.'

As regards the genies' instruments, Heuzey reiterated earlier observations that the bucket was probably made of metal that held liquid.

> Ce vase de métal, très analogue à la *situle* égyptienne, est bien plutôt fait pour contenir un liquide, peut-être ici une eau lustrale quelconque. Notez que, sur un autre bas-relief du même palais, on le voit tenu ainsi par un tributaire qui apporte des objets d'orfèvrerie, et sans doute en même temps quelque essence précieuse.[204]

Like Bonavia, Heuzey supported this argument by referring to the palace reliefs of Aššurnasirpal II at Nimrud. In fig. **23** we see a detailed drawing of one such bucket held by a genie and represented on a Nimrud wall relief. In fig. **24** we see four examples of such buckets on another Nimrud relief, without their handles and without the incised decoration. Next to them we see some of the precious metals needed to manufacture these luxury items: ingots of silver, gold, and/or copper. For every relief that featured a genie holding a bucket, Heuzey identified the bucket as either metal, a *situla* (i.e., a decorated bucket-shaped container usually of metal or pottery), or both.[205]

Quoting Lenormant, Heuzey identified the 'cone' as a cedar cone, used in rituals.

> . . . il existe, dans les textes magiques chaldéens, une formule de conjuration qui ne laisse subsister aucun doute: 'Prends le fruit du cèdre,' dit ce texte, 'et présente-le à la face du malade'; le cèdre est 'l'arbre qui donne le charme pur et qui repousse les démons ennemis tendeurs de pièges.' Après cela, il n'y a plus qu'à donner, une fois pour toutes, le nom de pomme de cèdre à l'objet placé dans la main de notre figure et des autres semblables.[206]

For every relief that featured a genie holding a 'cone,' Heuzey identified it as a pine or cedar cone.[207] He explicitly labelled the bucket and 'cone' in every instance as ritual instruments used for rites of worship and protection. Referring, for example, to figs. **1–2**, Heuzey wrote,

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[204] Ibid., p. 55.

[205] See, e.g., Heuzey's entries in Pottier, 1924, p. 49, '. . . tenant de la main gauche un vase en form de *situle*. . . .'; p. 51, 'Le génie porte, suspendue de la main gauche, une *situle*, sorte de petit seau de métal, que son anse mobile, accrochée à des anneaux fixes, ne permet de confondre ni avec un vase de terre, ni avec un panier'; p. 53, 'Le petit seau, que nous avons démontré plus haut être un récipient métallique, contenait l'eau, celle des fleuves sacrés, si l'on veut'; p. 69, '. . . de la [main] gauche abaissée un vase de métal dont les parois imitent un tissu tressé et dont l'anse mobile est passée dans des plaques mobiles d'attache en forme d'oiseau éployé.'

[206] Ibid., pp. 52–53 and n. 4, where Heuzey cited Lenormant, t. 1, 1880, p. 84, n. 2.

[207] See, e.g., Heuzey's entries in Pottier, 1924, p. 49, '. . . la main droite levée la pomme de cèdre. . . .'; p. 51, 'La main droite élevée tient presque horizontalement un objet conique, ayant tout à fait l'apparence d'une pomme de pin. . . .'; p. 54, '. . . la pomme de cèdre. . . .'; p. 56, '. . . la pomme de cèdre. . . .'; p. 57, '. . . la pomme de cèdre. . . .'; p. 69, 'De la main droite élevée, il tient une pomme de cèdre. . . .'

> Il s'agit ici d'une scène religieuse essentiellement assyriene. . . . Le sujet, pris en général, se rapporte évidemment au culte de l'arbre sacré, culte d'adoration comme aussi de protection. Il ne peut y avoir de doute que sur le caractère exact et sur les détails du rite que nous voyons s'accomplir: c'est là que les hypothèses se sont donné carrière.[208]

Heuzey did not explicitly connect his interpretation of the liquid in the metal bucket with the pine or cedar cone held by the genies nor refer to the function of the 'cone' as like an aspergillum. To this extent he retreated from Bonavia's explanation, which may explain why Heuzey did not cite Bonavia in his text, or G. Rawlinson for that matter. It would appear that Heuzey came up with his ideas regarding the 'cone' and bucket as ritual instruments somewhat independently ('somewhat' since he referred to Lenormant's ideas, which we have traced to Rawlinson's interpretation of the 'cone' and bucket).

Heuzey also argued that Herodotus' description of the technique used to artificially fertilize date palms is not the one illustrated in fig. **2**.

> . . . les savants qui ont adopté l'hypothèse de la fécondation artificielle du dattier n'ont-ils pas manqué de reproduire cette sculpture comme un de leurs meilleurs arguments; le malheur est que l'opération, telle que nous l'a décrite Hérodote, n'a rien de commun avec ce que l'on voit ici. Ce n'était pas par un simple attouchement que les anciens habitants de la Mésopotamie y procédaient; ils liaient des rameaux entires de l'arbre mâle aux arbres à fruits, de façon que le pollen se répandît en abondance sur les fleurs femelles.[209]

This observation reveals another problem with Tylor's theory, which is that Herodotus' description of artificial fertilization is at odds with Tylor's idea that the genies 'sprinkled' the AST with pollen. Tylor had quoted from Herodotus, who described the branch-tying method of fertilization, and he had also quoted from Theophrastus, and Pliny to a lesser extent, who described the shaking or sprinkling method. It is convenient for Tylor to claim that the method described by Theophrastus and Pliny is the one illustrated in fig. **2**. But we might think that Herodotus' description, which portayed a method supposedly used in Babylonia, was the one used in Mesopotamia. Also, Herodotus wrote at a date chronologically closer to the Assyrian and Babylonian empires, so perhaps he had a better idea of the method used at that time in Mesopotamia versus other methods described later on.

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[208] Ibid., p. 51.

[209] See ibid., p. 56. Perrot later reiterated this point: see Perrot, 1937, p. 102.

Without any certain knowledge of the specific technique or techniques used in Mesopotamia, the most we can say is that either the branch-tying and/or the shaking/sprinkling method could have been used.[210] Heuzey correctly pointed out that Tylor's select use of texts to fit his own interpretation of fig. **2** is suspect.[211]

Together with Pinches and Heuzey, there were others who thought that the AST represents a tree but not one that is necessarily a date palm being fertilized. Philologist and archaeologist Sidney Smith took it to be a cedar tree that was being anointed by genies holding cedar cones whose resin was used for that purpose.[212] Budge's third edition of the British Museum Guide also interpreted the activity of the genies as possibly anointing, explaining the 'cone' as a cedar cone used to anoint, for example, the king, with a liquid mixture stored in the genies' metal buckets.

> The analogy of . . . e.g., [our fig. **19** with fig. **1**] suggests that the priest is performing a ceremony of anointing on the *king*, and not on the tree. It is known from ritual texts in the British Museum from the Library of Assurbanipal, that the anointing of the king was a prescribed ceremony thus: 'You (i.e., the priest) shall slaughter a lamb and smear the king (with its blood or fat?). When you have purified the king with smearings of purity and completed them, you shall send him out at the gate. After you have purified the palace with a *ḫulduppu* goat, and a goat burnt in the fire, and a live sheep, and a . . . and the skin of a great ox, and with seed corn, the serving priest shall anoint male and female with the juice of Ninurta. He (the priest) shall mix oil and butter with honey, he shall anoint himself, he shall put on dark-coloured raiment, and draw on a dark-coloured cloak.' The 'juice of Ninurta' is the mixture of oil, butter and honey, and is probably contained in the metal bucket sculptured on the bas-relief. Here the priest is wearing a divine headdress with three horns, which shows that he represents one of the 'Great Gods,' but elsewhere we see him wearing a mask in the form of the head of the bird of prey sacred to Ninurta. The object in the priest's right hand is no doubt a cedar cone. The *ḫulduppu* goat and an ear of corn

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[210] Pliny also referred to natural pollination by wind, which we should consider part of our list of possible methods for pollinating date palms. Wind pollination can be regarded as a 'method' insofar as it involves planning the planting of a male date palm in proximity to female date palm, in order that the wind can successfully carry the pollen to the female flowers.

[211] Heuzey was further suspicious of interpreting the 'cone' as a date spadix because he could not see how a date spadix would have been considered an appropriate motif for decorating the feet of Assyrian furniture. See Pottier, 1924, p. 52, 'Une autre raison, que l'on n'a pas fait valoir, c'est que les Assyriens empruntaient volontiers la forme du même cône écailleux, en la retournant, pour terminer les pieds de leurs meubles. Est-il possible d'imaginer des lits, des tables, des trônes, portant, même en apparence, sur quelque chose d'aussi fragile et d'aussi peu consistant que les pointes renversées de quatre inflorescences de palmier?'

[212] Smith, 1922, p. 44 and n. 3.

> are depicted on [our fig. **53**]. The scene sculptured on this slab represents an act in a sacred play.[213]

This catalogue entry has described the genies' activity towards the king seen in fig. **1** and not the genies' activity towards the AST seen in fig. **2**, since the guide did not reproduce fig. **2**. The 'cone' in fig. **1** is understood to function like an aspergillum: here the genies anoint the kings with the 'cone,' using a mixture prescribed by the ritual. It is not at all clear how the subject matter of fig. **2** would have been described, had it been included in this guide. There were a few scholars later on in the mid-twentieth century who did describe the 'cone' in fig. **2** as an aspergillum, and the activity as purification, but it would take some time before this particular interpretation received attention in the literature.[214]

The clergyman, editor, Latinist and ancient Near Eastern iconographer William Hayes Ward also thought that the AST represents a tree, a date palm in fact, but that the genies were not fertilizing it. Rather, they were plucking its dates. Ward had accepted all three of Tylor's claims concerning the AST but had rejected his fertilization theory. He replaced Tylor's theory with the explanation that the genies' cones represented conventionalized date bunches, picked by the genies, which were then stored in their buckets. Ward applied this interpretation to every scene in which the 'cone' and bucket appeared. For example, in his descriptions of figs. **1**, **13–14**, **19** and **22** Ward wrote:

> It will be noticed that the fruit in these utterly conventional representations looks like pine cones, but is rather to be thought of as the bunches of dates hanging from the tree. Even bunches of grapes are sometimes drawn with similar cross lines on the bas-reliefs. These 'cones' are often seen on the palmettes and equally terminating the branches of the trees of life; and the

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[213] Budge, 1922, pp. 43–44 (emphasis and parentheses his).

[214] Following G. Rawlinson and Lenormant, see, e.g., G. Contenau, *Manuel d'archéologie orientale depuis les origines jusqu'à l'époque d'Alexandre*, t. 3, *Histoire de l'art. Premier millénaire jusqu'à Alexandre*, Paris, 1931, pp. 1183, 1254. Following Boscawen, again see Contenau, *Everyday Life in Babylon and Assyria*, trans. K. R. and A. R. Maxwell-Hyslop, New York, 1954, p. 76 (=*La vie quotidienne à Babylone et en Assyrie*, Paris, 1950, p. 82), '. . . in certain churches in the Mardin region, in the north of ancient Assyria, the priest uses a holy water sprinkler in the shape of a cedar cone for his sprinklings of lustral water, [and so] we may fairly conclude that . . . the [Nimrud] bas-reliefs represent ceremonial sprinklings (which were a feature of Assyrian religion) of the life-giving water drawn from the mouths of the Tigris and Euphrates; while the container with handles which the genies are carrying is not a basket but a wrought metal bucket, holding the purifying water.' See also A. Moortgat, *Die Kunst des Alten Mesopotamien, Die klassische Kunst Vorderasiens*, Köln, 1967, p. 136 (and Moortgat, *The Art of Ancient Mesopotamia, The Classical Art of the Ancient Near East*, trans. J. Filson, London and New York, 1969, p. 132), who referred to the 'cone' as an aspergillum and the bucket as 'a basin full of holy water.' See chapter 13 below for further discussion of the purification interpretation.

> winged figures each side of the trees carry the same cones in one hand and a basket in the other [as in figs. **13–14, 22**]. . . . In [fig. **19**] the winged figure . . . presents the fruit to the king, the basket being held in the other hand. . . . In [fig. **1**] the winged disk of Assur is over the tree of life and the king stands in worship on each side, and behind him the winged figure holds towards him the fruit, having the basket in the other hand.[215]

Ward interpreted every scene including the genies, 'cones' and buckets as scenes of fruit-picking (fig. **2**) or fruit-offering (fig. **1**). Ward's interpretation of these hand-held 'cones' as representing bunches of dates reflected a similar perception previously expressed by Bonavia in his interpretation of the 'cones' adorning the AST of fig. **13**:

> With regard to this particular form of tree, Lenormant, in his *Origines de l'histoire,* vol. 1, p. 83, n. 2 says, 'This tree has all round it a series of branches, regularly disposed, each branch ending in a cone of fir or cedar; nevertheless the artist has not given to his plant either the foliage or the habit of a coniferous tree.' . . . I do not think [the Assyrian artist] ever intended those cones to represent 'fir or cedar cones.'. . . [T]he bunches of grapes are represented as *cones* with *crossed lines* on the surface, in order to represent rudely the grape-berries. They are shown as *cones,* but no one could mistake them for anything else but *bunches of grapes*. . . .[216]
>
> The great probability, therefore, is that the cones of the sacred tree . . . to which Lenormant refers, are meant for nothing more than *bunches of grapes,* roughly and conventionally represented. . . .[217]

Bonavia had also thought the genies' hand-held cones represented citrons, but he had refuted that interpretation by 1894, deciding finally they must represent cedar cones.[218] Whereas Bonavia had distinguished between 'cones' appearing on ASTs and 'cones' held in the hands of genies, Ward did not. Ward maintained that the cross-hatching on the 'cones' seen on ASTs (such as fig. **13**) as well as those held by genies (such as fig. **1**) indicated that both represented dates.[219] His rationale for this interpretation is closely linked to his understanding of all ASTs as conventionalized representations of trees.

Ward applied his 'fruit-picking' interpretation to all different types of ASTs, and even examples dated prior to the Neo-Assyrian period, such as figs. **25–26**. Ward found these two examples the most visually persuasive and supportive of his fruit-picking interpretation.

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[215] Ward, 1910, pp. 222–23.

[216] Bonavia, 3/1 (1888–89), p. 12 (emphasis his).

[217] Bonavia, 3/2 (1889), p. 35 (emphasis his).

[218] See Bonavia, 1894, pp. 66–72, 86–87.

[219] See previously Ward, *Cylinders and Other Ancient Oriental Seals in the Library of J. Pierpont Morgan,* New York, 1909, p. 77.

> There are two seals which have an important bearing on the purpose and meaning of the winged figures which accompany the sacred tree. One of these is shown in fig. [**25**]. . . . The central tree is clearly the palm type, although conventionalized. On each side there is a composite figure. . . . There are two main branches on each side, terminating in what one may call flower or fruit, and each of the two attendant figures seizes one in each hand. . . . In this case it is absolutely certain that the purpose of the attendant figure is not to fertilize the fruit; it is much more likely that the purpose is to pluck it off.
>
> That such is the purpose is made quite certain by the design in fig. [**26**]. . . . Here again there is no question that the tree is a modified date-palm. From the summit there arise five clusters of the fruit; and a winged human figure with the head of an eagle, such as is familiar in the Assyrian art, with evident effort is breaking off the bunch of dates, if we may so call it; he has rested his foot on the lower part of the tree, so as to secure a purchase for his pull, and with one hand he holds the fruit, while with the other he bends its stem so as to break it off. We are left here under no reasonable doubt that the purpose is to gather the fruit, not to fertilize it. We may then conclude that the object of the pail or basket (the occasional weaving would allow either) is to hold the fruit gathered from the tree.[220]

Fig. **25** is dated stylistically to the Mitannian period, and fig. **26** to the Middle Assyrian period.[221] We can see from his chapter devoted to the AST that Ward discussed both second- and first-millennium BC examples in his analysis; and that he developed his fruit-picking interpretation from these two second-millennium BC cylinders (figs. **25–26**) and applied it to all Neo-Assyrian dated scenes involving genies and ASTs. However, when it came to describing the composition of fig. **2**, Ward seemed reluctant to apply his own interpretation.

> There is one bas-relief [our fig. **2**] which has been adduced to support the idea that this is a case of fertilization of the pistillate by the staminate blossoms

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[220] Ward, 1910, pp. 230–31.

[221] For fig. **25**, see H. H. von der Osten, 'The Museum Collection of Oriental Seal-Stones,' *Bulletin of the Metropolitan Museum of Art* 20 (1925), p. 83 (fig. 11), 84. See p. 84 for von der Osten's description, 'A beautifully preserved and executed rock crystal cylinder of Assyrian origin shows the sacred tree framed by two figures, half-bull, half-man; in a circle four symmetrically arranged demons are kneeling and between them again appear sacred trees.' For fig. **26**, see Ward, 1909, pp. 77–78, cat. no. 160, where Ward described the genie as one who 'plucks the fruit and gathers it in a basket. . . .' (see also Ward, 1910, fig. 707); and E. Porada, ed., *Corpus of Ancient Near Eastern Seals in North American Collections*, vol. 1, *Bolligen Series* 14, New York, 1948, p. 71, 'Red sard cylinder. Griffin-demon tearing branch from tree. . . .'

> of the date-palm. Here the cone is crowded into a palmette on a tree of life rather than into a floral cluster. It is evident that the crowded slab did not allow room for the cone without its pressing into the tree.[222]

It is not clear why Ward did not identify the 'cones' here as bunches of dates. Rather, he seems to have decided that the close proximity between the 'cones' and palmettes was a result of space limitations, and not, as Sarton later observed, evidence that the artist intended to depict the artificial fertilization of a female date palm.[223] Although Ward's interpretation of fig. **2** is rather vague, he maintained that Tylor's fertilization theory was not tenable:

> The usually accepted interpretation of this design [e.g., figs. **1–2**] is that the sacred tree is worshipped, that it was a palm, in original intent, of which there can be no doubt, and that the attendant with the 'cone' in his hand really holds the staminate flowers of the male palms, with which it is necessary to dust and fertilize the pistillate blossoms. This is requisite, and the account of it comes down to us from classical times. But there is absolutely no evidence that this is the meaning of the design. We are indebted to E. B. Tylor (*Nature*, June 23, 1890; *Proceedings of the Society of Biblical Archaeology*, June, 1890) for this really brilliant and fascinating suggestion, which is accepted by Bonavia, in his *Flora of the Assyrian Monuments*, and also by d'Alviella in *The Migration of Symbols*, and by many other writers. To be sure, as far as we know from classical writers it was not the custom to dust the fertile flowers with the sterile, but only to bring the sterile bunches where the wind would carry the pollen, but Bonavia finds in the winged genies the symbols of the wind. I cannot but think that this explanation, even with its sexual attractiveness which so fascinates some people, is really farfetched, and that a nearer explanation is called for.[224]

Ward criticized Tylor's theory on the basis of a lack of evidence. Heuzey had later observed the same problem with Tylor's theory, which was that the description of 'classical writers' (i.e., Herodotus) did not necessarily fit with the activity depicted in fig. **2**.[225] In fact, we have no evidence to support or contradict that any of the three methods known concerning the artificial fertilization of date palms was used in Mesopotamia—that is, branch-tying, branch-sprinkling (or -dusting), wind pollination. Though Ward stood firmly against a fertilization explanation, he maintained that the AST represents a date palm, an interpretation 'of which there can be no doubt.' This particular view, that the AST represents a tree but not necessarily one that is being fertilized, was common among those arguing against the fertilization theory in the twentieth century.[226] As a result, those who insisted on a date palm identification were heavily reliant on the claims of formal similarity and social significance.[227]

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[222] Ward, 1910, p. 231.

[223] Sarton, 1934, p. 10, '. . . in this case the eagle-headed genius introduces the object which he is holding in his hand *into* the flower: his intention of touching the flower and reaching the very heart of it cannot be mistaken' (emphasis his). But see Bonavia, 1894, pp. 76–77, who had previously made the same point as Ward about space limitations, 'Referring to Dr. Tylor's arguments, [d'Alviella] says: "On a bas-relief, in the Louvre, we see one of these genies actually plunging this object into one of the palmettes figured at the top of the branches [similar to our fig. **2**]." This mode of reasoning may overlook the *straits* to which the sculptor may have been put, owing to the *smallness of the slab*! In the British Museum, there is [a similar composition] . . . and the sculptor, for want of sufficient space, has made the cone-hand of one genie *encroach* on the tree. This interpretation seems supported by the fact that the sculptor was forced to cut off a bit of the wings of that same figure, *for the same reason*!' (emphasis his).

[224] Ward, 1910, p. 230.

There were very few at this time who doubted that the AST was a date palm. However, the historian of Norse mythology Birger Pering was one who openly contested such an identification. He proposed that the AST looked nothing like a living tree but resembled a festoon-decorated pole.

> Besonders bezeichnend ist jedoch, dass der Lebensbaum [AST] gar nicht den Eindruck eines lebenden Baumes, sondern eines mit Festons geschmückten Pfahles macht.[228]

Here Pering cited Garlick's article, in which she had argued for Tylor's theory and identification of the AST as a date palm. Pering referred to Garlick's observations of the AST design, where she described the criss-crossed 'arbor' design of (e.g.) fig. **2** as

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[225] Others had observed this same problem with Tylor's theory: after Heuzey, see, e.g., Contenau, t. 3, 1931, p. 1183; Perrot, 1937, p. 102; and Contenau, 1954, p. 76 (1950, p. 82).

[226] E.g., see Contenau, 1931, p. 1183; Danthine, 1937, pp. 119–20; and Perrot, 1937, p. 102ff., who also considered the AST a representation of a tree (palm) that was being 'protected' or worshipped but not fertilized. (Later, see Contenau, 1954, pp. 75–76 [1950, pp. 81–82], where he reiterated his 1931 position.) See also C. J. Gadd, *Ideas of Divine Rule in the Ancient Near East, The Schweich Lecture of the British Academy, 1945,* London, 1948, p. 91, who argued that the 'tree' (though not a palm) is the 'source of magic virtue which the genies take and transfer to the king, or the king draws directly by touching the tree.' And see Stearns, 1961, p. 71, who thought the AST represents a stylized tree but not one being fertilized; Moortgat, 1967, p. 136 (Moortgat, 1969, pp. 132–33), who considered the AST a stylized tree, blessed and protected by the genies and king. More recently, see J. Asher-Greve and G. J. Selz, *Genien und Krieger aus Nimrūd, Neuassyrische Reliefs Assurnaṣirpals II. und Tiglat-Pilesars III, Zürcher Archäologische Hefte* 4, Zürich, 1980, pp. 18, 20–22, who interpreted the AST as a stylized tree but not one being fertilized; and Magen, 1986, p. 80, who considered the AST a stylized tree being purified.

[227] Consider, e.g., Contenau, 1954, pp. 73–75 (1950, pp. 78–81), who discussed at length the importance of the date palm to the inhabitants of Mesopotamia immediately before discussing the AST and its identification as a date palm.

[228] B. Pering, 'Die geflügelte Scheibe in Assyrien, Eine religionsgeschichtliche Untersuchung,' *Archiv für Orientforschung* 8 (1932–33), p. 289, and n. 77, where Pering cited Garlick, 1918.

> . . . a complex system connecting together what may be called a grove of palmettes. Certain incised lines plainly show that these festooning bands are of some woven fabric.
>
> It needs, perhaps, some stretch of imagination to see here the picture of a male-flowered palm growing in the midst of a grove of female-flowered trees, all festooned together for the festival with loops and ends of drapery, in origin a necessity but now merely an adornment.[229]

Garlick applied the idea of stringing ribbon around a palm grove for a fertility rite to her reading of fig. **2**, which she interpreted as representing such a rite, with a central male palm connected by festoonery to female palms standing at the edges. This reading is unique, as far as I am aware. Pering adapted Garlick's festoonery concept to his reading of (e.g.) fig. **2**, which he interpreted as a decorated pole, like a May-pole.

In addition, Pering noted that there must be a distinction between ASTs and date palms and that one cannot be the equivalent of the other, as both are represented together in the same scene, as seen on the Black Stone in fig. **3**.[230] This observation recalls Fergusson's remarks concerning the Black Stone that since ASTs and a date palm are represented together there, they must represent distinct symbols.

Pering supported a purification interpretation of the genies' activity and instruments in relation to the AST, summarizing Bonavia's views.

> Die Lebensbaum-Szene ist eine Reinigungs-Zeremonie. Die Priester (Genien) wenden den Nadelbaum-Zapfen als 'aspergillum' an. Das Reinigungswasser schöpfen sie aus dem Metallgefäss, das sie in der linken Hand halten.[231]

As well, Pering cited the purification rituals quoted above in Budge's third edition of the British Museum Guide as support for the idea that the genies portrayed in figs. **1–2** were purifying the king and AST. He further dismissed Tylor's theory by quoting the archaeologist Ernst Herzfeld's own consideration of the fertilization theory.

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[229] Garlick, 1918, p. 112.

[230] See Pering, 1932–33, p. 289, 'Auf dem gleichen Monument kann man hier und da sowohl einen natürlichen Baum wie einen stilisierten Lebensbaum sehen, beide mit ihren charakteristischen Kennzeichen dargestellt.' (Here Pering cited [n. 78] Meissner, Bd. 1, 1920, Tf.-Abb. 80=our fig. **3**.) Pering went on to suggest an interesting interpretation of these two distinct symbols, 'Dies hat zu der Annahme Veranlassung gegeben, dass sie "zwei verschiedenen Gottheiten zugeeignet sein werden."' (Here Pering cited Unger, 'Lebensbaum,' *RLV 7*, p. 261ff.)

[231] Pering, 1932–33, p. 289, and n. 81, where he cited Bonavia, 3/1 (1888), pp. 1–6 and 4/4 (1890), p. 96. Although less committed to anti-fertilization arguments generally speaking, Andrae, 1933, p. 12, did interpret the genies' activity as 'segnend oder befruchtend wirken.'

> [Der] Genius findet sich häufig symmetrisch verdoppelt vor einem baumartigen Gebilde, und man hat in dieser wappenartigen Form eine Darstellung des Befruchtens der Dattelpalmen erkennen wollen. Das ist falsch. Diese Verwendung is sekundär und rein dekorativ. Die primäre Bedeutung der Genien ist die, die Schwellen durch Besprengung mit geweihtem Wasser für böse Geister unüberschreitbar zu machen, wofür sich aus der assyrischen Beschwörungsliteratur viele Belege zitieren lassen.[232]

Here Herzfeld had articulated his support for an aspergillum interpretation of the 'cone,' where the 'cone' functioned as a sprinkler, drawing water from the bucket, for purifying thresholds.[233] In this light, Pering further analyzed the 'anointing' interpretation put forth in Budge's third edition of the British Museum Guide, in order to demonstrate Ninurta's connection to the ritual shown in relief and that god's probable representation there as hovering over the AST.[234]

Pering began his argument against a date palm identification for the AST by citing Meissner's analysis that the climate was too cold in Assyria for date palms to carry edible fruit.[235] This question of climate conditions in Assyria in the first millennium BC was used by those arguing for and against the date palm theory. By laying out what we know of the climate conditions in Mesopotamia, we will be in a better position to determine how and whether this question helps to determine what the AST represents.

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[232] Pering, 1932–33, p. 289. Originally see F. Sarre and E. Herzfeld, *Iranische Felsrelief, Aufnahmen und Untersuchungen von Denkmälern aus alt- und mittelpersischer Zeit*, Berlin, 1910, p. 160.

[233] Sarre and Herzfeld, 1910, p. 160, 'Auch die Assyrer—nicht die Babylonier—stellen in ihren Toren stets einen viergeflügelten Genius dar, der in der gesenkten Linken einen Weihwasserkessel hält, während er mit der Rechten aus einem Aspergillum in Form eines Pinienzapfens Weihwasser auf die Schwhelle sprengt.' Herzfeld was not necessarily committed to identifying the 'cone' as a pine cone and cited Bonavia, who identified it as a cedar cone.

[234] Pering, 1932–33, pp. 289–90. (Cp. Budge, 1922, pp. 43–44, 'The "juice of Ninurta" is the mixture of oil, butter and honey, and is probably contained in the metal bucket sculptured on the bas-relief.')

[235] Ibid., pp. 288–89, 'Da nun die Dattelpalme in Assyrien keine essbaren Früchte trug. . . .' See Meissner, Bd. 1, 1920, pp. 203, 205.

9 Climatic considerations

Early twentieth-century adherents of the date palm theory continued to accept the interpretation that, since Assyria's climate was too cold to support fruiting date palms, the AST must therefore represent a symbol inherited from the south. Early twentieth-century detractors of the date palm theory continued to argue that, since climate conditions were too cold in Assyria, the activity around the AST could not represent artificial fertilization and/or that the AST could not represent a date palm. In this chapter, we shall try to determine how much is known about the climate conditions and the extent of fruiting date palms in Mesopotamia in the first millennium BC, how much of that knowledge is assumed, and whether there is any value in pursuing this line of inquiry as it pertains to the AST.

Our own beliefs today concerning climate conditions, and, subsequently, the extent of date cultivation in first-millennium BC Mesopotamia, are partly inherited from nineteenth-century scholarship. Nineteenth-century scholars believed that the climate conditions of Iraq in the first millennium BC were quite similar to those of nineteenth-century Iraq.[236] In understanding the climate, and in understanding the limits of date cultivation in nineteenth-century Iraq, scholars believed they had understood the extent of date cultivation in ancient Mesopotamia.[237] These beliefs supported the idea that if date palms did not produce fruit, or edible fruit, in northern Iraq in the nineteenth century, they were unlikely to have done so there in the first millennium BC.[238] These early ideas concerning parallel climate conditions for present-day Iraq and first-millennium BC Iraq made their way into the twentieth century; and they have been recently expressed as the 'current scholarly opinion.'[239]

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[236] E.g., see G. Rawlinson, vol. 1, 1862, p. 266, who wrote that 'historically . . . temperatures and conditions [in Assyria] were anciently very nearly what they are now.'

[237] G. Rawlinson discussed the (then) present-day limits of date cultivation in Iraq, describing those limits as within 'Mesopotamia' and 'Assyria'; see ibid., p. 267, 'The only tree which is known anciently cultivated in Mesopotamia is the date palm, and as this ceases to bear fruit about latitude 35° (where the most southern part of Assyria extends from latitude 34° to 35°30') its greater cultivation could have prevailed only in a very small portion of the country.'

[238] E.g., Bonavia, 4/4 (1890), p. 93, who cited Rassam that date palms grow 'in the vicinity of Nineveh . . . but do not fruit' in order to support his argument that the activity around the AST cannot represent artificial fertilization. See also d'Alveilla, 1894, p. 149, 'It must be remembered that [the Assyrians] could not attach to the cultivation of the date-palm the same importance as the inhabitants of Lower Chaldæa. In fact, though the palm grows in Assyria, the date does not ripen there.' (Therefore, d'Alviella argued, the AST-as-date-palm represents a general symbol of fertility.) Note the difference here between Bonavia (via Rassam), who stated that date palms did not fruit in Nineveh, and d'Alviella, who implied that they did fruit by stating, 'the date does not ripen there.'

Despite this apparent consensus, scholars in the field of ancient Near Eastern studies still disagree on the extent of date-growing in first-millennium BC Mesopotamia. The following four views on the subject illustrate the range of possibilities one encounters when trying to determine whether dates grew in first-millennium BC Assyria (see the maps in figs. **27–28** for the locations named).

> The modern day limits to date cultivation are commonly held to approximate a line drawn between 'Ana ['Anā] and Samarra [Sāmarrā']; to the south of this dates may be reliably grown for fruit. Date palms can, however, grow at least as far north as Mosul [Mawṣil, opposite Nineveh, Nīnawā] (though not fruiting in this district) and they are attributed a reasonable resistance to frost by Popenoe [1924/1973], who also mentions that there were palms in the district of Erbil [Irbīl] until the 'Great Frost' of 1909–10. So the possibility of date growing in Assyria at some time in the past should not be dismissed completely.[240]

> Grapes were grown to the north-east of Nimrud, and various types of fruit and nut were common, especially figs, pomegranates and pistachios; although palm trees flourished, the dates themselves, a staple food in southern Mesopotamia, did not normally ripen in the north.[241]

> . . . Dattelpalmen, die reiche Früchte tragen, wären für die Gegend von Ninive undenkbar. . . . Da aus den bereits oben angeführten Gründen Dattelpalmen im nördlichen Irak (Ninive-Mosul) nicht recht gedeihen und keine Früchte tragen können. . . .[242]

> Date palms did not fruit in Assyria, as far as we know, and dates are therefore

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[239] See most recently Russell, 1998, p. 688 and n. 90, who summarized the views of B. N. Porter, 'Sacred Trees, Date Palms, and the Royal Persona of Ashurnasirpal II,' *Journal of Near Eastern Studies* 52 (1993), p. 137, n. 21, 'Current scholarly opinion is that climatic conditions in the area [of present-day northern Iraq] were not significantly different in Assyrian times.' Porter gave no source to support this opinion. The tenor of these remarks concerning parallel climate conditions seems to follow also from early twentieth-century scholarly interpretations; see, e.g., Garlick, 1918, p. 111, 'Presumably the temple rite in question [see our fig. **2**, which Garlick understood as a depiction of the artificial fertilization of a date palm] was an ancient inheritance from the older Babylonian religion, grafted on to the Assyrian State religion, for the date-palm as a source of food was of supreme importance to the Babylonians—dwellers on the sandy river plain—but far less so to the Assyrians of the hilly district of the North.'

[240] Charles, 1987, p. 2.

[241] J. and D. Oates, *Nimrud, An Assyrian Imperial City Revealed*, London, 2001, pp. 13–14.

[242] Bleibtreu, 1980, pp. 202, 208. See p. 202, n. 240 for the 'previously stated reasons' (also quoted below).

> mentioned only rarely in Assyrian texts as a temple offering, more than once as a Babylonian import.[243]

Two questions can help us analyze these statements: (1) Is the author stating that date palms could have fruited as far north as Assyria; and, if so, could this fruit have ripened? (2) What sources are cited to support each statement?

The archaeologist Michael P. Charles thought that date-growing (i.e., fruiting and ripening) may have occurred as far north as Assyria in the first millennium BC. He based this possibility on an early twentieth-century record of palms having grown at Arbīl (Erbīl, Irbīl; located southeast of Mosul, Mawṣil) before the 'great frost,' that is, pre-1909. Since weather conditions had allowed palms to exist in Irbīl pre-1909 that fruited (?) or carried ripened dates (?)—this is not made clear—Charles postulated that date-producing palms could have existed there during the Neo-Assyrian period. Charles based the possibility of first-millennium BC Assyrian date cultivation on climate and conditions that had once existed at an early twentieth-century northern Iraqi city. His source for the Arbīl information was Popenoe, whom we now know was a date palm specialist.

Joan and David Oates, also archaeologists, generally stated that date palms grew in 'the north' (i.e., formerly Assyria), and we gather from their choice of words that these palms fruited; however, the fruit did not 'normally' ripen there. Does this mean that 'abnormal' conditions prevailed at some sites and that dates ripened there? They do not address this possibility, nor do they cite any sources for their views.

The archaeologist Erika Bleibtreu, whose remarks referred to reliefs found in Aššurbanipal's North Palace at Nineveh that include natural-looking date palms, implied that date palms fruited in Nineveh but that their fruit could not ripen. She stated ouright, however, that date palms could not even bear fruit in Nineveh. She based her opinion in both cases upon reconstructive work done on Mesopotamian climates dating from 5,000 to 2,000 BC, from which she assumed that parallel climates existed in Assyria and modern-day northern Iraq; and she also based her opinion upon modern-day analyses of the limits of date cultivation in Iraq.[244]

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[243] J. N. Postgate, 'Notes on Fruit in the Cuneiform Sources,' *Bulletin on Sumerian Agriculture* 3 (1987), p. 130.

[244] Bleibtreu, 1980, p. 202, n. 240, 'Da der letzte Klimawechsel in Mesopotamien um 3000 v. Chr. stattgefunden hat, dürfen wir für das 1. Jahrtausend v. Chr. die gleiche klimatisch bedingte Verbreitung von Bäumen annehmen wie für die Gegenwart (vgl. Nützel 1975: 27-38). Nach Wirth, 1962: 166, gibt es Palmoasen am Südwestrand der Vorketten des Zagros, jedoch Kirkuk und alle Gebirgsrandstädte des Nordirak gehören nicht mehr zur Zone der Palmoasen, da hier keine Palmen gedeihen (vgl. op. cit. Karte 27).' For these sources, see W. Nützel, 'Das Mesopotamien der Frühkulturen in Abhängigkeit der nacheiszeitlichen Klimaschwankungen und Meeresspiegleänderungen,' *Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin* 107 (1975), pp. 27–38 and E. Wirth, *Agrargeographie des Irak, Institut für Geographie und Wirtschaftsgeographie der Universität Hamburg*, Hamburg, 1962.

Nicholas Postgate, philologist and archaeologist, flatly denied that date palms could fruit as far north as Assyria. He based his opinion upon Neo-Assyrian sources—administrative lists and historical inscriptions.[245]

Here we have a range of responses. Charles left open the possibility of date cultivation as far north as Assyria, while J. and D. Oates left open the possibility that in 'abnormal' cases date palms fruited and their fruit ripened in Assyria. Bleibtreu thought that date palms could not fruit that far north; and Postgate is quite explicit on this point. From this small survey, it is evident that scholars do not yet agree on the extent of date-growing in Mesopotamia. Furthermore, those scholars who do think that date palms fruited in Assyria do not agree on what stage of development was possible for the dates—that is, fruiting but not ripening, or fruiting and ripening enough for pig food, or fruiting and ripening enough for human food when cooked, or fruiting and ripening enough for human food when raw.

Why does it matter whether date palms fruited in Assyria, and if so, whether their fruit ripened? Because beliefs about whether date palms fruited in Assyria have affected how scholars have interpreted certain texts and images, and even how they have thought about the purpose and function of Assyrian imagery. For example, what should we think about the question of fruiting date palms in light of Aššurnasirpal II's 'Banquet Stele'? That text describes the inauguration ceremonies of the new Assyrian capital at Nimrud and also includes a list of trees planted 'by' Aššurnasirpal in orchards near the palace: 'I irrigated the meadows of the Tigris (and) planted orchards with all kinds of fruit trees in its environs.'[246] This list of fruit trees includes date palms. From this, should we assume that palms could have fruited in Aššurnasirpal's gardens at Nimrud? Other similar texts from the Assyrian empire also force us to ask whether date palms could have produced edible fruit that far north.[247]

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[245] See Postgate, 1987, p. 130, n. 57, where Postgate cited his source as [E. Reiner et al., eds.,] *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 15, *S*, Chicago, 1984, pp. 374b–375a, '*suluppū*.' Cuneiform texts record the existence of date palm groves in southern Mesopotamia but not to my knowledge in northern Mesopotamia: see, e.g., V. Scheil, 'De l'exploitation des dattiers dans l'ancienne Babylonie,' *Revue d'assyriologie et d'archéologie orientale* 10 (1913), pp. 1–9.

[246] The 'Banquet Stele' records the planting of orchards near the king's palace at Nimrud and a list of trees seen by Aššurnasirpal on his campaigns. Those who have analyzed the orchard portion of the text think that the list of trees seen is the same as those also planted in the orchards. See, e.g., D. J. Wiseman, 'A New Stela of Assur-nasir-pal II,' *Iraq* 14 (1952), pp. 27–28; Wiseman, 'Palace and Temple Gardens in the Ancient Near East,' in T. Mikasa, ed., *Monarchies and Socio-Religious Traditions in the Ancient Near East. Papers read at the Thirty-first International Congress of Human Sciences in Asia and North Africa, Bulletin of the Middle Eastern Culture Center in Japan*, vol. 1, Wiesbaden, 1984, p. 38; Postgate, 1987, p. 128; J. J. Glassner, 'À propos des jardins mésopotamiens,' in R. Gyselen, ed., *Banquets d'Orient, Res Orientales* vol. 3, Bures-sur-Yvette, 1991, p. 13; A. K. Grayson, *Assyrian Rulers of the Early First Millennium B.C., 1 (1114–859 B.C.), The Royal Inscriptions of Mesopotamia Assyrian Periods*, vol. 2, Toronto, 1991, p. 288; and J. and D. Oates, 2001, p. 33. See Grayson, vol. 2, 1991, p. 290, for a translation of the orchard portion of the text, 'I dug out a canal from the Upper Zab, cutting through a mountain at its peak, (and) called it Patti-ḫegalli. I irrigated the meadows of the Tigris (and) planted orchards with all kinds of fruit trees in its environs. I pressed wine (and) offered first-fruit offerings to Aššur, my lord, and the temples of my land. I dedicated this city to Aššur, my lord. In the lands through which I marched and the highlands which I traversed, the trees

We face the same issue with images. Depending upon how we answer the question of whether date palms fruited in Assyria and whether that fruit ripened, our interpretation of, for instance, fig. **29**, will be affected. This scene, the so-called Garden Party or Banquet Scene featuring Aššurbanipal and his queen Aššuršarrat, has been identified by most scholars as taking place within the environs of Aššurbanipal's North Palace at Nineveh.[248] However, according to Bleibtreu, this relief could not have depicted a scene taking place in Nineveh, as fruiting date palms (seen here in the background at the far right) could not fruit that far north.

> An den beiden äußeren Palmen sind deutlich Fruchtrispen zu erkennen. Der Rispenstiel, an dem zu beiden Seiten die Datteln sitzen, ist naturalistisch durch eine leichte Zickzack-Linie angegeben. Da aus den bereits oben angeführten Gründen Dattelpalmen im nördlichen Irak (Ninive-Mosul) nicht recht gedeihen und keine Früchte tragen können, scheint es sich bei

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(and) plants (lit. "seeds") which I saw were: cedar, cypress, *šimiššalû*, *burāšu*-juniper, . . . , *daprānu*-juniper, almond, date, ebony, *meskannu*, olive, *ṣuṣūnu*, oak, tamarisk, *dukdu*, terebinth and *murrān*u, *meḫru*, . . . , *tīiatu*, Kanish-oak, *ḫaluppu*, *ṣadānu*, pomegranate, *šallūru*, fir, *ingirašu*, pear, quince, fig, grapevines, *angašu*-pear, *ṣumlalû*, *titipu*, *ṣippūtu*, *zanzaliqqu*, "swamp-apple," *ḫambuququ*, *nuḫurtu*, *urzīnu*, and *kanaktu*. The canal cascades from above into the gardens. Fragrance pervades the walkways. Streams of water (as numerous) as the stars of heaven flow in the pleasure garden. Pomegranates which are bedecked with clusters like grape vines . . . in the garden . . . [I], Ashurnasirpal, in the delightful garden pick fruit like . . . [. . .]'

[247] Consider Sennacherib's aqueduct inscriptions, which record that king's planting of orchards that include date palms in Nineveh (discussed below with bibliography). Also consider Meissner, Bd. 1, 1920, p. 203, where he discussed the possibility that the boundary for date cultivation may have existed farther north in antiquity than at present. In proposing this, Meissner cited a text of the Neo-Assyrian governor Šamaš-reša-usur, who had date palms planted well north of the currently recognized date-cultivating border: 'Der Baum bedarf, um genießbare Früchte zu tragen, einer mittleren Jahrestemperatur von 21–23° C. Heute bilden die Palmgrenze am Euphrat und Tigris die Städte Ana und Tekrit; im Altertum lag sie vielleicht etwas nördlicher. Der mesopotamische Fürst Schamasch-rêsh-ußur, der sich Statthalter von Suchi und Ma'er nennt, Landschaften, die am mittleren Euphrat etwa zwischen dem heutigen Dêr [Dayr az Zawa, Deir el-Zor] und Ana gelegen haben, berichtet uns wenigstens, daß er in und bei mehreren Städten seines Ländchens Dattelpalmen gepflanzt habe. Er hat sich also zweifellos bemüht, die Palmen weiter nördlich zu akklimatisieren. Ob er damit dauernden Erfolg erzielt hat, ist aber wohl unsicher.' Meissner cited F. H. Weissbach, ed., *Babylonische Miscellen, Wissenschaftliche Veröffentlichungen der deutschen Orient-Gesellschaft* 4, Leipzig, 1903, no. IV, 12, 1ff., for the Šamaš-reša-usur text.

[248] In particular see P. Albenda, 'Landscape Bas-Reliefs in the *Bīt-Ḫilāni* of Ashurbanipal. Part I' *Bulletin of the American Schools of Oriental Research* 224 (1976), pp. 61, 63, 67. Albenda, 1976, did not raise the question of fruiting date palms in Assyria in her analysis.

> der hier dargestellten Gartenszene eher um einen Park in Elam zu handeln, etwa um den königlichen Park in Susa (?).[249]

Our identification of the location of this scene is determined by our views concerning the meaning of such imagery. Depending on what kind of information we think fig. **29** conveys, we may consider the question of fruiting date palms in Assyria relevant or irrelevant. Bleibtreu thought the question relevant. Others have not.[250] It has been remarked that the question of fruiting date palms in Assyria as applied to fig. **29** is not worth asking, as the relief could be using artistic license to portray date palms as fruiting in a region that may not have been able to sustain date growth.[251] Bleibtreu believed the question of fruiting date palms in the north to be relevant because she took the scene to represent something like a photographic shot of an event. Such opposing views represent the crux of the issue: are we meant to see these images as recording specific details that convey actual events or as 'works of art' that capitalized upon artistic artifice to produce a successful composition? Partisans of both views appear to think that their own interpretations are simply 'common sense,' when they are clearly theories, which need to be argued for.

Therefore, the question of fruiting date palms would seem to matter when interpreting fig. **29**. However, scholars have tended to apply this question much more frequently to figs. **1–2**. Why? The reasons appear to be based mainly on historical trends of thought.

Tylor had claimed that the AST must represent a date palm since dates were an important economic asset to Assyria. And he asserted that the formal similarities between the AST and a date palm grove, as well as between the genies' 'cones' and male date spadices, support an identification of the AST as a date palm. Knowledge of the extent of fruiting date palms in Mesopotamia has been used to assess these claims, and it has since been argued that because date palms could not fruit in Assyria, both of Tylor's claims are moot. We saw that d'Alviella, in the late nineteenth century, followed by Garlick in the early twentieth century, dealt with modern-day knowledge of the unfavorable climate conditions in northern Iraq by asserting that the AST must represent a symbol of a date palm, taken from the more southerly regions of Mesopotamia where dates were grown in vast quantities. There is a shift in thought here away from Tylor's idea that the AST actually looks like (and therefore represents) a date palm, to d'Alviella's/Garlick's idea that since the AST cannot reasonably represent an actual date palm due to climate conditions etc., it must therefore represent a symbol of one. This maneuver has been necessary to maintain a date palm identification for the AST.

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[249] See Bleibtreu, 1980, p. 208. See also her footnote to this (208, n. 250), 'Die weitreichenden Konsequenzen, die diese Annahme nach sich zieht, gehen über den Rahmen dieser Arbeit weit hinaus. Es ist im Anschluß an Albenda's [1976, etc.] Argumentationen eine eigene Untersuchung aller in diesem Relief aufscheinenden antiquarischen Details vorgesehen.'

[250] The view that the 'Banquet Scene' records an event that took place in Nineveh regardless of the question of fruiting date palms in this region was most recently expressed in a paper given by A. Winitzer, 'Assurbanipal's "Garden Scene," An Interpretation,' *49e Rencontre Assyriologique Internationale: NINEVEH*, 10 July 2003, London. Curiously, Winitzer based his tree and plant identifications on Bleibtreu, 1980, yet still maintained that the scene took place in Nineveh.

[251] This point was made during the question and answer period of Winitzer's paper.

The idea that the AST represents a symbol of a date palm has held sway up to the present. This idea underlies most twentieth- and twenty-first-century discussions of the AST and is a legacy of the shift in thought effected initially by d'Alviella. By claiming that the AST is a symbol of a date palm being fertilized, scholars writing especially in the last thirty years have regarded it as representing a number of general, abstract concepts, such as fertility, abundance or the good stewardship of Assyria.[252] Recently the issue of climate conditions

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[252] For descriptions of the AST seen in figs. **1–2** as a symbol of fertility see, e.g., S. Paley, *King of the World, Ashur-nasir-pal II of Assyria 883–859 B.C.*, Brooklyn, 1976, p. 24, as a symbol of 'vegetation,' 'fertility'; V. Crawford, P. Harper and H. Pittman, *Assyrian Reliefs and Ivories in the Metropolitan Museum of Art, Palace Reliefs of Assurnasirpal II and Ivory Carvings from Nimrud*, New York, 1980, p. 23, as a symbol of 'vegetal life and fertility'; D. Kolbe, *Die Reliefprogramme religiös-mythologischen Charakters in neuassyrischen Palästen, Die Figurentypen, ihre Benennung und Bedeutung, Europäische Hochschulschriften* XXXVIII/3, Frankfurt am Main, 1981, p. 83, 'symbolic fertilization'; Eiland, 1993, pp. 15, 17, 'symbolic ritual fertilization'; Porter, 1993, pp. 134, 138, as a symbol of 'agricultural abundance'; A. Spycket, 'Reliefs, Statuary and Monumental Paintings in Ancient Mesopotamia,' in J. Sasson, ed., *Civilizations of the Ancient Near East*, vol. 4, New York, 1995, p. 2587, 'fertilizing'; I. Winter, 'Art *in* Empire, The Royal Image and the Visual Dimensions of Assyrian Ideology,' in R. Whiting and S. Parpola, eds., *ASSYRIA 1995, Proceedings of the Tenth Annual Neo-Assyrian Text Corpus Project, Helsinki, September 7–11, 1995*, Helsinki, 1997, p. 361, '. . . the image directly behind the throne dais and opposite the main doorway, where we see the king participating in the ritual fructification of the "sacred tree". . . .'; Porter, '"For the Astonishment of All Enemies," Assyrian Propaganda and Its Audiences in the Reigns of Ashurnasirpal II and Esarhaddon,' *Bulletin of the Canadian Society for Mesopotamian Studies* 35 (2000), p. 16, 'symbolic pollination of the "tree".' Most recently, see Porter, 'Winged Genie Fertilizing a Date Tree, Seasonal Time and Eternity in Ancient Assyria,' in J. Schall, ed., *Tempus Fugit, Time Flies*, Kansas City, MO, 2000, p. 216, 'The winged figures . . . are no ordinary farmers; in their hands, the gesture of pollination becomes one of divine blessing, conferring abundance on the world—a metaphorical reading of the gesture also suggested by the presence of similar winged figures extending their flower clusters toward the palace's doorways, conferring metaphorical fruitfulness on all who pass through.'

For the AST as a date palm symbolizing prosperity and good government, see, e.g., W. G. Lambert, 'Trees, Snakes and Gods in Ancient Syria and Anatolia,' *Bulletin of the School of Oriental and African Studies* 48 (1985), p. 438, '[The AST is to be understood as a date palm since the] fertility of palms was understood in a figurative sense of prosperity or success . . . similar to the Roman's *bona Fortuna*'; and Winter, 2000, pp. 78, 75, '. . . on Neo-Assyrian seals . . . the motif of the king and semi-divine creatures flanking [the AST] . . . probably bore intrinsic meaning . . . in relation to the well-being of the land [of Assyria] . . . exemplifying the welfare of the state through proper action of the ruler.' Most recently, see Winter, 'Ornament and the "Rhetoric of Abundance" in Assyria,' in I. Eph'al, A. Ben-Tor, P. Machinist, eds., *Hayim and Miriam Tadmor volume, Eretz-Israel* and the extent of date cultivation in Assyria has been raised again as support for identifying the AST in figs. **1–2** as a symbol of a date palm. Note how the following mimes d'Alviella's line of thought, ninety-nine years later:

> The choice of date palms as an emblem of agricultural abundance for an Assyrian palace seems strange when one realizes that the Assyrians did not raise date palms as a crop. . . . It was only farther south, in Babylonia, that date palm orchards flourished, providing dates for all Mesopotamia. . . . What made the Assyrians decide to adapt this obscure Babylonian artistic motif as the dominant theme of Ashurnasirpal's palace, when the Assyrians themselves did not raise date palms? I think the answer is . . . suggested by the highly stylized form the date palm is given in the scene. . . . [I]n the pollination scenes in the Northwest Palace, the Assyrians chose . . . to depict a highly stylized tree, suggesting, I think, that they conceived of the tree in that scene from the outset as a figural tree, seizing on the idea of the date palm and its pollination precisely because it was not part of their daily agricultural life, but was already at one remove from it and was thus readily transformed in their art into an emblem of agricultural abundance as a divine gift.[253]

In the rest of this chapter we will analyze the evidence continually cited by those who apply the question of fruiting date palms in Assyria to the question of what the AST represents. What we shall find is that this evidence is inconclusive and that the questions of whether and to what extent date palms fruited in Assyria must, for the present, remain unanswered.

Early twentieth-century botanists have provided us with our main source of information on the cultivation of date palms in modern Iraq. Scholars looking into questions of the climate conditions necessary for producing

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27 (2003), p. 253, 'The one obvious candidate for a reference to the role played by the Assyrian ruler in relation to productivity of the land is [our fig. 1]. The tree is surely based upon the date palm . . . it . . . has overtones of a generic "Tree of Abundance," which quality the tree embodies through its highly stylized composite construction. . . . Thus [this] composite tree is one composed of the extended life-cycle of the palm, productive in dates and also in offspring; given the pride of place of that motif in the throne room, it may well have served as the formal statement of the king's role in achieving the desired abundance for the land, concretizing thereby the ideal prosperity alluded to in the royal texts. . . .' See a further analysis of the 'tree of abundance' interpretation in chapter 12 below.

[253] Porter, 1993, pp. 137–38. Prior to Porter, see B. P. Mallowan, 'Magic and Ritual in the Northwest Palace Reliefs,' in P. O. Harper and H. Pittman, eds., *Essays on Near Eastern Archaeology in Honor of Charles Kyrle Wilkinson*, New York, 1983, p. 38, 'The date palm does not thrive in the modern-day location of Assyria and is killed in cold weather. As there is no evidence that the climate in Late Assyrian times was much different from that of today, the date palm would have had no agricultural value or practical significance. Its adoption by the Assyrians [for the AST] as an apotropaic motif must have been the result of Bablyonian influence.' Also see Paley, 1976, p. 22, 'Actually, the date palm did not flourish in Assyria or northern Mesopotamia and it is possible that the Assyrian king was boasting when he incorporated the palm tree in the fertilization motif.'

dates, the location of centers of date production, and the specific techniques of artificial fertilization used in Iraq depend upon the work of V. H. W. Dowson and Paul Popenoe. Aided by their research, we can come to some conclusions regarding the existence of cultivated date palm groves in Mosul (Mawṣil), located opposite ancient Nineveh, and the specific techniques used to artificially fertilize date palms. Dowson and Popenoe were mainly concerned with modern date production, and so it must be kept in mind that our conclusions here apply to the date culture of early to mid-twentieth-century Iraq.

As noted at the beginning of this section, those scholars who have applied the question of fruiting date palms to the meaning of the AST have believed in the parallel climate theory. According to this theory, if we understand the climate conditions and extent of date-growing in the modern era, we shall understand the date culture of ancient Assyria. Dowson's and Popenoe's research is indispensable for our analysis of the parallel climate theory.

Dowson summarized the extent of Iraq's date cultivation for commercial purposes in his definitive monograph on the subject.

> In the 'Iraq the date palm flourishes everywhere it is watered and attended, from Ana on the Euphrates and Samara on the Tigris southwards. North of these towns the winters are too cold, though there are five palms at Tekrit and several at Erbil. Major Wimshurst . . . Government Agricultural Entomologist, has reported that most of the palms in the Erbil district were killed by the great frost of . . . 1909–10.[254]

From Dowson's map (fig. 30), we gather that the range of date cultivation (indicated by masses of small dots) is focussed in the south, and indeed Dowson goes on to write that 'the most important area of date cultivation in the 'Iraq, and, indeed, in the world, is that of the Shatt al-'Arab' area in the Basra region of Iraq.[255]

Since neither Tekrit (Takrīt) nor Arbīl (Irbīl) appears on Dowson's map showing the distribution of date palms in Mesopotamia, he must have considered their handful of palms insufficient to include or that the palms in these two cities did not produce dates. However, in citing Wimshurst's report that 'most of the palms in the Erbil district were killed' between 1909 and 1910, he leads us to believe that there were more than just a few palms there prior to 1909. Did this constitute a date palm grove that fruited and ripened in what was once Assyria proper pre-1909? Dowson does not say.

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[254] V. H. W. Dowson, *Dates and Date Cultivation of the 'Iraq, Agricultural Directorate, Ministry of Interior, Mesopotamia, Memoir* III, 3 parts (1921–23), *Pt. I, The Cultivation of the Date Palm on the Shatt al-'Arab*, Cambridge, 1921, p. 4. Dowson must have been Popenoe's source for this information (see Charles, 1987, p. 2, who had cited Popenoe as the source), since Popenoe depended upon Dowson's research for his assessment of date-growing in Iraq: see Popenoe, 1924 (1973) p. 23, n. 10, 'Unless otherwise noted, all quotations in the section on Iraq are from V. H. W. Dowson, 1921.'

[255] See Dowson, 1921, p. 5, who listed Baghdad as the next largest date cultivation center in the country (see here also for a list of the remaining centers in order of importance). See also Popenoe, 1924 (1973), pp. 23–24, for date centers of production led by the Shatt al-'Arab, Basra and Baghdad.

Popenoe had incorporated Wimshurst's information into his own larger discussion concerning the cold winter temperatures that can be endured by date palms still capable of producing edible fruit. According to Popenoe, date palms can endure more frost than most subtropical fruits and even survive in snow; only when the cold is unusually prolonged or severe will the date industry suffer. As a means of illustrating an extreme case of cold that had adverse effects on the date culture, Popenoe cited the Arbīl/Irbīl example.

> . . . it is not rare to find the [date] industry virtually wiped out in a given region, because of an unusually severe winter. Thus, almost every palm in the Erbil district of Mesopotamia was killed in the great frost of 1909–10. . . .[256]

In context, Popenoe's remarks indicate that date palms once fruited as far north as Arbīl/Irbīl. Popenoe does not tell us whether these dates were of commercial quality and/or grown for commercial purposes. But it would appear that they grew there pre-1909; and, if Popenoe is making every word count, it would appear that they constituted something of an 'industry.'

Having said which, references to modern-day date cultivation in northern Iraq are rare. Beyond citing Wimshurst's report, neither Dowson nor Popenoe discussed northern Iraqi date palm groves in their monographs. This strongly suggests there were none to speak of, at least on a commercial level.[257] Notably, in later publications, Dowson delineated a northern line of date cultivation that included the Upper Euphrates region, but not the Upper Tigris region where Assyria once lay.[258] From this we deduce that date cultivation for commercial purposes did not exist in early to mid-twentieth-century northern Iraq, but that does not discount the possibility that in the right conditions it may have been possible for date palms to fruit in certain places, and produce edible fruit.

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[256] Popenoe, 1924 (1973), p. 44.

[257] Heat and water are the two factors cited as essential for successful date cultivation (see Popenoe, 1924 [1973], pp. 42–50). It has been noted that northern Iraq lacks both in the right quantities, and therefore the north cannot sustain date growth. On the 'barrenness' of northern Iraq and its unsuitability for date cultivation see, e.g., G. Rawlinson, 1862, vol. 1, 1862, pp. 267–68; and Porter, 2000, pp. 214–15, and esp. n. 9.

[258] See Dowson, 'Appendix, Notes on the Date Palm in Iraq,' in H. Field, *The Anthropology of Iraq, The Lower Euphrates-Tigris Region, Anthropological Series Field Museum of Natural History,* vol. 30, pt. 1, no. 2, Chicago, 1949, p. 407, 'The date palm grows south of a line joining Ana, Abu Kemal, Tikrit [Takrīt], Kirkuk [Kirkūk], and Khanaqin [Ḫāniqīn]. This corresponds roughly to 35° N. Lat.' (See our map, fig. **27**, for these locations, except for Abu Kemāl, which is not shown: it is located just over the Syrian border, on a line continuous with 'Anā; for Khanaqin [Ḫāniqīn], also not shown: it is located to the east of Sāmarrā', on a line continuous with it.) See also H. Field, *The Anthropology of Iraq, The Upper Euphrates, Anthropological Series Field Museum of Natural History,* vol. 30, pt. 1, no. 1, Chicago, 1940, fig. 3 and p. 21, '. . . Abu Kemal [is] the northern limit of the cultivation of *Phoenix dactylifera* (see Dowson).' Finally, see *Dates—Handling, Processing and Packing Prepared by V. H. W. Dowson and 'A. Aten, FAO Agricultural Development paper* no. 72, Rome, 1962, pp. 1–2, 'In Asia, the northern limit of date cultivation is about

Other arguments have been used against the idea that date palm could fruit. For example, it has been claimed that northern Iraq's lack of both an irrigation system and heavy rains is considered detrimental to date cultivation. However, it appears that date palms can survive and thrive in certain locations with very little water; in fact some have a strong aversion to rain.[259] For those varieties of palm that needed irrigation, texts tell us that the Assyrian royal capitals were well supplied with water for such purposes.

> A widespread royal concern for prosperity in Assyria itself is shown by several texts. Some describe the 'new cities' such as Kalhu [Nimrud] and Dur Sharrukin [Khorsabad], built at royal command; others depict Nineveh's revitalisation as a result of Sennacherib's massive refurbishment of the old city; the provision of water for the population is stressed in all three cases—most striking is Sennacherib's construction of an impressive aqueduct to supply the garden-plots of the citizens of Nineveh.[260]

Sennacherib's efforts remind us of the orchard-planting activities performed by his predecessor Aššurnasirpal II.[261] Both kings record their great concern that their new capitals are fit for their gods, their people and themselves; and how the planting and irrigating of lush gardens and orchards was a necessary part of their duties. Such information suggests we leave open the possibility that conditions necessary for date cultivation may have existed in Assyria and that, if the climate had been slightly different than it is now, dates may have fruited and ripened in certain areas of the region. We do not yet have enough information to rule out this possibility.

Significantly, Popenoe presented information that suggests the possibility that the climate conditions in the Mosul-Nineveh region were different in the past than they are now. In a discussion of the most northerly outpost of date cultivation in Persia, Popenoe cited the work of Ibn Yaqut (1179–

32° north in the Indus Valley. The date frontier then follows the southern edge of the Turko-Perso-Afghan mountain mass till it reaches about 35° north in Iraq and then turns southwest along a line represented by the I. P. C. Kirkuk-Haifa oil pipe, till it meets the Mediterranean at the Gulf of Gaza.'

[259] See, e.g., Popenoe, 1913, p. 37; Popenoe, 1924 (1973), p. 46.

[260] A. Kuhrt, *The Ancient Near East c. 3000–330 B.C.*, vol. 2, London, 1995, p. 536.

[261] See T. Jacobsen and S. Lloyd, *Sennacherib's Aqueduct at Jerwan*, *The University of Chicago Oriental Institute Publications*, vol. 24, Chicago, 1935, p. 31, 'As indicated by [aqueduct] inscription B, the aqueduct at Jerwan and the canal to which it belongs were constructed for the purpose of supplying Nineveh with water. They thus take their places in that astounding succession of hydraulic engineering works by which Sennacherib transformed the barren environment of his new capital into a garden of almost paradisiac fertility.'

1229), an Arab geographer and biographer who had lived in Mosul during the last years of his life.

> A thousand years ago, when the climate was possibly warmer than it is now, the palm flourished farther north than this. Ibn Yaqut (III, 158) mentions particularly the town of Sinjar, in the latitude of Mosul to the west, of which the magnificent gardens were celebrated for their dates, oranges, and lemons.[262]

This information gives an indication of late twelfth- to early thirteenth-century climate conditions in northern Iraq, which apparently took part in the so-called Medieval Warm Period and supported a date culture in certain areas. Sinjar is farther north than Arbīl, on the same latitude as Mosul. If Ibn Yaqut is correct, Iraqi climate conditions were different 700 to 800 years ago than they are now or were in the nineteenth to twentieth century. If this is true for the climate conditions of medieval Iraq, what are the possibilities for ancient Iraq?

The answer, unfortunately, is that we do not know. There is a great deal of work on global temperature change, but (a) results for as long ago as 2,500 years do not pretend to great accuracy, and (b) local variations are in any case so marked that it is not possible to deduce regional temperatures from global temperatures.[263] The best evidence we have that date palms fruited in ancient Assyria is Aššurbanipal's 'Garden Party'—and possibly Aššurnasirpal's 'Banquet Stele'—neither of which helps us very much.

Ibn Yaqut's description of the Sinjar gardens, and the difficulties we currently have in assessing the climate conditions for first-millennium BC Assyria, mean we cannot rule out the possibility that date palms fruited in Assyria, and particularly at the royal Assyrian cities of Nineveh and Nimrud. Therefore, we are not in a position to use the parallel climate argument either to support or disprove the fertilization theory or the idea that the AST represents a symbol of a date palm, for the very reason that the parallel climate argument cannot at this point in time be proved or disproved.

Actually knowing whether date palms fruited in the north would not prove that the AST represents a date palm. Nor would it disprove that the AST represents a date palm. As regards the AST, such knowledge is frankly immaterial. The main motivation for thinking that the issue of fruiting date palms can help us identify the AST is thinking that the AST represents a date palm in the first place.

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[262] Popenoe, 1924 (1973), p. 22, n. 7. See Yaqut ibn 'Abdallah ur-Rumi, *Mu'jam al-budān,* (*Jacut's Geographisches Wörterbuch*), vol. 3, ed. F. Wüstenfeld, Leipzig, 1866–73, p. 158. Sinjar does not appear on our map (fig. 27), but it is located next to Hariyyat al Ḫān.

[263] Intergovernmental Panel on Climate Change, *Climate Change 2001, The Scientific Basis*, Cambridge, 2001, para 2.3.3.

10 Bucket and cone revisited

In chapter 4 we saw how Tylor asserted that the genie's hand-held 'cone' closely resembled a male flower cluster.

> I now proceed to examine the form of the male inflorescence which is conveyed to the fruit-bearing date-palm, in order to show its close resemblance to the sculptured cone carried in the hand of the Assyrian winged deity . . . from one of the colossal bas-reliefs of the British Museum. . . . The similarity of the sculptured cone to the real palm-inflorescence, taken together with the fact of its being shown as carried to the date-palm, might be considered to prove that the scene at the sacred tree represents the artificial fertilization. The further examination of the monumental evidence, far from invalidating the argument, confirms it by consistent details.[264]

Tylor tried to demonstrate this close resemblance between a male flower cluster and the genies' cones through various comparisons of actual flower clusters taken from the Italian Riviera (figs. **4**, **6**) and Kaempfer's eighteenth-century drawing of a specimen (fig. **7**).[265] More recently, Barbara N. Porter reiterated this type of argument, comparing male flower clusters cut from date palms living in late twentieth-century Iran (fig. **10**). However, the male flower clusters drying in the sun in fig. **10** stand 1 foot to 1½ feet high (note the meter stick among the flower clusters).[266] The nineteenth- to twentieth-century flower cluster specimens from the Middle East that I have seen at Kew Gardens measure at least 1½ feet long, the flowers fanning out to a width of at least 6 inches.[267] Proportionally speaking, these are much larger than a genie's hand-held 'cone.' To my eye, these look nothing like the Assyrian 'cones,' though to Porter's eye the comparison was convincing.[268]

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[264] Tylor, 1890, pp. 387–88.

[265] For a good description of the male flower cluster of a date palm, see, e.g., Popenoe, 1913, p. 111; and Popenoe, 1924 (1973), p. 92. According to these descriptions, the genies' 'cones' have no formal similarities with actual male clusters.

[266] The source for our fig. **10** is *Date Production and Protection with special reference to North Africa and the Near East; prepared by the Horticultural Crops Group, based on the work of V. H. W. Dowson, FAO Plant Production and Protection* paper no. 35, Rome, 1982, p. 61. From the same source see also p. 39, which shows a male flower cluster standing next to a 50-cm ruler; the flower cluster stands at aproximately 50 cm.

[267] These are equivalent to approximately 50 cm at their longest and form part of the date palm specimens collection, Royal Botanic Gardens, Kew, Richmond, U.K.

[268] Porter, 1993, p. 134, 'The male flower clusters are oval in shape [referring to fig. **10**] and bear a marked resemblance to the oval object in the ancient carvings [referring to, e.g., figs. **1–2**].' Prior to Porter, see, e.g., Crawford et al., 1980, p. 22, who described a relief of

Dowson supplied us with early twentieth-century examples of male flower clusters, freshly cut from palms in Baghdad in 1918. In fig. **31**, a seated man holds a spadix with its stem facing outwards, which he has just extracted from its spathe. Nearby, other spadices also extracted from their spathes lie with their stems facing outwards. In fig. **32**, two men squat over a stack of spadices: those spadices nearest us still have on their spathe covers, though we can discern flower clusters having broken through.[269] Both figures give us a sense of the size of male spadices, and Hélène Danthine's sketch from a newspaper photo of 1935 conveys the proportions well (fig. **33**). Like fig. **10**, these images of male flower clusters have no proportional resemblance to the genies' hand-held 'cones.' It is only when these flower clusters, or flower clusters enveloped in their spathes, are seen in relation to humans that we can judge their actual size. Tylor's presentation of flower clusters alone, as in figs. **6–7**, conveys no sense of scale. When he does present one held by a human hand, as in fig. **4**, we see that the cluster does not fit into the palm of that hand, in the way that the 'cone' object is held by the genie, as in fig. **5**. A flower cluster is too large to be cupped from behind in the palm of the hand.

There are other warnings, apart from those concerning physical differences, that should make us hestitate before we identify male flower clusters with the genies' 'cones.' These concern the extent of our knowledge of methods of artificial fertilization and how we use that knowledge to make assertions about past practices. We have no textual or visual knowledge of how Mesopotamian farmers artificially fertilized their date palms, assuming that they did. As we have seen, scholars usually cite figs. **1–2** as evidence to support ancient knowledge of artificial fertilization. This type of argument, however, is circular.

Tylor quoted from Herodotus, Theophrastus and Pliny to prove that the genies' activity is best explained as hand-pollination. Their words conveyed a very specific technique to Tylor.

> The natives [i.e., Babylonians] tie the fruit of the male-palms, as they are called by the Greeks, to the branches of the date-bearing palm, to let the gall-fly enter the dates and ripen them. . . .[270]

> . . . as soon as the male tree blossoms they cut off the spathe on which the flower is with no more ado and shake the downiness and flower and dust over the fruit of the female, and if this is done the female keeps its fruit and does not drop it.[271]

'cone'-bearing genies at the AST as 'Winged human-headed divinities stand either side of the king and before the sacred tree, administering some purifying substance with a date-palm spathe and a bucket.'

[269] D. T. Potts, *A Feast of Dates,* London, 2002, p. 78, provides a well-photographed example of male spadices similar to those shown in our figs. **31–32**.

[270] Herodotus, *Histories*, 1.193.

[271] Theophrastus, *Historia Plantarum*, 2.8.4.

> . . . the fecundation is even contrived by man, from the males by the flower and down, sometimes even only by the dust being sprinkled on the females.[272]

From this, Tylor thought the practice involved shaking an entire intact male flower cluster over the female's flowers. That is why he compared an intact flower cluster from the Italian Riviera to the genie's 'cone.' The ancient authors provide general descriptions of different methods, such as tying, shaking, sprinkling, but their descriptions are too vague for us to know the precise technique involved in each method. For example, what exactly did Theophrastus mean? His description, like that of Herodotus and Pliny, sounds abbreviated, and one wonders whether he left out any steps between cutting off the male spathe and shaking its pollen onto the female tree.

Our lack of knowledge concerning the specifics of ancient practices forces us to look to modern descriptions of artificial fertilization for help. None of the modern practices recorded by botanists cites Tylor's description of shaking an entire flower cluster over the flowers of a female palm.[273] All the modern methods surveyed involve more steps, as well as different ones, than those described by the ancient authors. Could Tylor be describing an ancient method no longer used in the modern period? He could be. Without recourse to relevant texts or images, we are likely never to know.

Dowson and Popenoe record nineteenth- to twentieth-century hand-pollination practices, and their descriptions give us some idea of the possibilities we might keep in mind when thinking about ancient practices. The most popular technique recorded by the experts is the 'inserting/tying' technique (perhaps referred to by Herodotus).[274] In figs. **32** and **34**, the men pull the flower clusters apart, in preparation for their role in fertilizing the females' flowers. In fig. **34** we see numerous sprigs, which formerly made up entire intact flower clusters. It is an individual sprig or a bunch of sprigs, but not the entire intact cluster, that is used to fertilize the female: a sprig (or sprigs) is inserted into a female flower cluster and then tied to the female cluster to insure pollination.

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[272] Pliny, *Natural History*, 13.7.34–35.

[273] This is *contra* Porter, 1993, p. 135, who cited a United Nations study, based on the work of Dowson, as describing 'Tylor's' technique: 'The study reports that one common method of pollinating date palms in the Near East is to cut a ripe male flower cluster, carry it up the female tree, and shake it over the female flowers to fertilize them, finally leaving sprigs of the male flower among the female flowers to ensure fertilization.' For the U.N. study, see *Date Production . . .*, 1982, p. 62. Dowson, as we shall see in the discussion below, never recorded such a method.

[274] See, e.g., Bonavia, 1885, p. 47; Popenoe, 1913, pp. 105–6; Pruessner, 1920, pp. 223–24, and p. 224, n. 1 (Pruessner quoted the American botanist W. T. Swingle, *The Date Palm and Its Utilization in the Southwestern States, U.S. Department of Agriculture, Bureau of Plant Industry, Bulletin* 53, Washington, DC, 1904, pp. 16, 26, 27); Dowson, 1921, p. 27; Popenoe, 1922, p. 352; Popenoe, 1924 (1973), p. 93; and Dowson, 1949, p. 409.

> In April, the male inflorescences (*tal*) are cut from the male palms (*fahl* or *dakar*) just before the pollen (*liqah*) is ready to be shed. They are divided into about twenty small sprigs (*ilb*), one of which is inserted into each of the female inflorescences (*iaq*) on the female palms.[275]

> This important operation is performed in the following manner: As soon as the spathe, or covering of the bunch of male flowers, has attained its full size and has come to maturity, it is detached. Its maturity is known by a faint rustling sound, elicited when the central part of the spathe is gently pressed between the fingers. Also if a slit is made in the margin of the spathe, so as to expose the flower, a peculiar odor is detected. When the bunch of mature male flowers is detached, the spathe is split open and the sprigs of male flowers are carefully removed and placed in a basket, which is then suspended and protected from draughts so as to prevent the pollen from being scattered. The male flowers are allowed to remain so for twenty to twenty-four hours before being used. As soon as the female flowers have burst their enveloping spathe, the cultivator considers them fit for impregnation. He then takes with him a number of male sprigs, climbs up the female tree, and inserts one or two sprigs of the male flowers into each bunch of female flowers, securing them with a strip of date leaflet. If the cultivator finds that some of the more forward female spathes have not yet burst, to save himself the trouble of reclimbing, he splits them open and inserts the male sprigs as before. Only very small and backward spathes he leaves for a subsequent operation, when he thinks them sufficiently matured.[276]

The reason for separating individual sprigs from the main branch of the male spadix is that the pollen itself is a precious substance that must be used economically (the spadix has been considered a commodity since at least the twentieth century). One might well have shaken a sprig of a cluster over a female's flowers before inserting it and securing it to the female cluster. However, according to the technique used in the nineteenth to twentieth centuries, one did not shake an entire male cluster over the flowers of a female date palm, as that would be uneconomical. One might tie an entire intact male cluster onto a female date palm (which has put forth several sets of female flower clusters) for fertilization but only in those cases where there is an abundance of male trees.[277] Herodotus' source may have been describing the process of tying an entire intact male cluster onto a female palm, or tying one sprig onto a single female cluster or a bunch of sprigs. In any case, the act of tying must have been thought significant to be included in Herodotus' general description.[278]

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[275] Dowson, 1949, p. 409. See also Popenoe, 1924 (1973), p. 95, 'The advantage of leaving a sprig of the male is that it continues to liberate pollen for several days—sometimes several weeks; thus female flowers which are not receptive at the time of pollination will receive fecundation when they open subsequently.'

[276] Popenoe, 1913, pp. 105–6, quoting from A. R. Hakím Bahadur, assistant to the political resident at Fars, in a memorandum dated 1 July 1884; and as recorded by Bonavia, 1885, p. 47. See Dowson, 1982, frontispiece, as well as Potts, 2002, pp. 25, 76 and 79, for good photographs of a farmer inserting a bunch of male sprigs into a female's flower cluster.

The experts also mention other ways that pollen can be applied to the female flowers, for instance, by using a 'brush or sponge.'[279] Popenoe referred to a practice in the southeastern part of Yemen where the pollinator rubbed or 'combed' the male flower over the females.[280] Finally, both Popenoe and Dowson referred to a 'dusting' method used in cases where the female clusters are out of reach from the ground, or where male pollen is scarce, or where there is an unusually large number of females to fertilize in a short period of time. In these cases,

> . . . the [male] pollen is shaken out of the ripe male flowers and tied up in a bag of fine muslin. This bag is tied to the end of a stick. The [pollinator] can quickly fertilize a large number of female inflorescences by dusting them with this bag.[281]

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[277] See Charles, 1987, p. 3, 'In cases where there is an abundance of male trees a whole inflorescence may be tied above the female flowers once they have begun to open, which means that the cultivator does not have to revisit each tree to ensure that pollination has taken place throughout the female racemes.' Also see Popenoe, 1924 (1973), p. 93, 'The lazy man's method is to tie an entire male inflorescence in the female palm, after the first two or three female spathes have opened; and this amount of pollen, being sufficient for several hundred palms, will usually suffice to pollinate all the flowers that open within the following two or three weeks. . . .'

[278] We may recall that Heuzey had cited Herodotus' description of tying the male flower to the female tree, 'The natives [i.e., Babylonians] tie the fruit of the male-palms, as they are called by the Greeks, to the branches of the date-bearing palm. . . .' For this reason, Heuzey had argued that the genies' could not be fertilizing the AST simply by using a 'touching' (or shaking) technique. For Heuzey's argument, see Pottier, 1924, p. 56, and quoted in our chapter 8.

[279] See Charles, 1987, p. 3, 'The male flowers are collected once ripe and the pollen is removed and applied directly to the female inflorescence, using a brush or sponge. . . .' Apparently the technique of carrying a small bag of pollen and a brush to fertilize a date palm was still used in Iraq in the 1980s (pers. comm. Jeremy Black).

[280] Popenoe, 1913, p. 352, n. 17, 'Count Landberg [a nineteenth-century Arabic scholar], whose account of pollination is the most accurate of any I have seen in philological writings, says that in the Ḥadhramaut the pollinator *rubs* the male flower over the females. I have not known this to be done elsewhere, and suspect that, as the Arab verb implies, the rubbing amounts to no more than "combing" the branchlets lightly' (emphasis his).

[281] Dowson, 1921, p. 27. See also Popenoe, 1924 (1973), pp. 94–95, 'Pollen may also be . . . put in a coarse bag with which the female inflorescence is dusted—a practice sometimes seen in Iraq.' And for a variation on this method, see again Popenoe, 1924 (1973), p. 93, 'To pollinate a palm whose racemes are out of reach from the ground, the Arab sometimes twists or ties a few sprigs of the male together, puts them on the end of a long pole, and then thrusts them into the center of the female inflorescence.' See Popenoe, 1913, p. 344, where he translated '*'afr*' 'to dust, hence, to pollinate'; and p. 351, where he translated '*'affar*' 'to throw dust.'

Fig. **35** shows a pollinator holding such a 'pollen-bag,' and fig. **36** shows the 'pollen-bag' in use. These images were photographed in Baghdad in 1918.[282] A related method has been described by the philologist and archaeologist Reginald Campbell Thompson.

> The word for the rope used by the man who climbs the palm to fertilize the [female flowers] is *tubalû*. . . . I have seen him, carrying the pollen in a little muslin bag, as he climbs the palm with both hands and feet, having the rope in a loop round himself and the tree to support him, exactly as described in Pliny *Natural History* xiii.7.[283]

Did the pollinator shake the bag over the flower clusters? This is not made clear. Does this modern dusting method have any relation to Theophrastus' 'dusting' and/or Pliny's 'sprinkling' method?

Given that that there are only so many ways to artificially pollinate date palms, and given that none of the techniques described by the experts requires modern-day equipment, we could say that any of these techniques might have been used by Mesopotamian farmers. Since we currently have no proof that any of these methods, or Tylor's 'shaking' method for that matter, were used in first-millennium BC Mesopotamia, it is misleading to presume that one type of method was used or even preferred over another.[284]

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[282] Dowson, 1921, p. 29.

[283] R. C. Thompson, *A Dictionary of Assyrian Botany*, London, 1949, p. 310. For '*tubalû*,' see also Landsberger, 1967, p. 19, 'instrument for climbing up the date palm for *rukkubu*' (and further p. 38); and W. von Soden, *Akkadisches Handwörterbuch*, Bd. 3 (S–Z), Wiesbaden, 1981, p. 1364, 'Halteseil aus Palmbast' and 'zur Baumbesteigung.' Cp. the Sumerian story of 'Inana and Šu-kale-tuda,' in which a raven climbs up a date palm using a harness (see the Electronic Text Corpus of Sumerian Literature [ETCSL] c.1.3.3., line 73). According to a modern re-telling of this story, the raven may have used the 'inserting' method to pollinate the first date palm (see F. Hazelton, 'Inana and Shu-kale-tuda,' in *Stories from Ancient Iraq*, London, 2006). But see the ETCSL translation, where the raven seems to have 'rubbed' something onto the pistils of the date palm.

[284] Another method of hand-pollination has insinuated itself into the AST discussion, i.e., the idea that the genie uses his 'cone' to sprinkle pollen stored in his bucket onto the AST. See, e.g., J. Eisenberg, 'Glyptic Art of the Ancient Near East, "A Seal Upon Thine Heart,"' *MINERVA* (July/August 1998), p. 16, fig. 35 (describing a seal as), 'Two fishmen with pollen baskets flanking the sacred tree.' As far as I am aware, filling a bucket with pollen and using a cone as a sprinkler was not an actual method used by date palm pollinators in the nineteenth or twentieth centuries. For another idea about how genies pollinate the AST, see Spycket, 1995, p. 2587 (describing the activity seen in our fig. **1**), 'Each genie holds in his right hand a pinecone, which he steeps in the water of a small bucket held in his left hand in order to fertilize the tree.' Spycket may have been referring to an actual pollination method described by Porter, 1993, p. 134, 'When the male flowers have been collected ahead of time, they may grow dry and are then dipped in water to make them less fragile during pollination; if dried pollen is used instead, it is common practice to sprinkle water over the female flowers after dusting them to keep the pollen from blowing away before complete fertilization occurs. In both cases, a bucket of water is part of the standard apparatus of date palm pollination.'

It is also misleading to presume that hand-pollination was practiced in Mesopotamia. It may have been practiced, but the evidence usually presented to support such practice is not convincing. Scholars rely on figs. **1–2** as support for the practice of hand-pollination, but as we have seen this type of argument is flawed. To date we have not found any images that obviously support the practice of hand-pollination in Mesopotamia. Texts, however, may supply a clue.

We may find that we are in a position to argue for the 'inserting/tying' method of hand-pollination based on certain passages from Hammurabi's Code. Pruessner introduced this possibility by first examining the modern practice of artificial fertilization of date palms. It is noteworthy in this regard that he only discussed the 'inserting/tying' method.[285] He then analyzed paragraphs 64 and 65 of the Code, in an effort to better define *rukkubu*(*m*):

> Law 64: If a man gives his orchard to a gardener to manage [*ana rukkubim*], the gardener shall give to the owner of the orchard two-thirds of the produce of the orchard, as long as he is in possession of the orchard; he himself shall take one-third.
>
> Law 65: If the gardener does not properly manage [*la urakkib(ma)*] the orchard, and he diminishes the produce, the gardener shall measure out the produce of the orchard on the basis of the adjacent orchards.[286]

Pruessner noted that 'the important work which the gardener is to perform, and through the neglect of which he may seriously diminish the produce of the date grove is designated by *rukubum*,' which though rendered in earlier translations as 'to manage,' Pruessner concluded 'must designate the act of fecundation.'[287]

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[285] Pruessner, 1920, p. 223, 'A thorough understanding of the process [of the artificial fertilization of date palms] will, in the writer's opinion, throw light on some difficult passages in [Hammurabi's] Code and the contract literature. We must therefore take our time to let our experts explain it to us.' At this point, Pruessner quoted extensively from the botanist Swingle, who described in detail the 'inserting/tying' method also described by Dowson, etc., and quoted in the body of our text.

[286] Ibid., pp. 224–25. See now M. T. Roth's transliteration and translation of these laws in her *Law Collections from Mesopotamia and Asia Minor*, 2nd ed., *Society of Biblical Literature*, *Writings from the Ancient World Series*, vol. 6, Atlanta, GA, 1997, p. 94, 'Law 64: *šumma awīlum kirāšu ana nukaribbim ana rukkubim iddin nukaribbum adi kirâm ṣabtu ina bilat kirîm šittīn ana bēl kirîm inaddin šaluštam šû ileqqe* (If a man gives his orchard to a gardener to pollinate (the date palms), as long as the gardener is in possession of the orchard, he shall give to the owner of the orchard two thirds of the yield of the orchard, and he himself shall take one third). Law 65: *šumma nukaribbum kirâm la urakkibma biltam umtaṭṭi nukaribbum bilat kirîm ana <bēl kirîm kīma> itēšu* [*imaddad* (. . .)] (If the gardener does not pollinate the (date palms in the) orchard and thus diminishes the yield, the gardener [shall measure and deliver] a yield for the orchard to <the owner of the orchard in accordance with> his neighbor's yields.)'

But what was involved in such an act? In turning to the cognate languages in order to analyze the Akkadian verbal root of *rakābum* (rkb), he noted two relevant points, one from Hebrew and the other from Aramaic:

> [the root] in the Hiphîl may mean *to graft*, *to place one branch upon another*. Reference is made to a passage in the Babylonian [Aramaic] Talmud, in which it is stated that it was lawful for the people of Jericho *to graft* [or place one branch of a date palm upon another] all day on the fourteenth of Nisan, because otherwise they would spoil. . . . Rabbi Rashi, commenting on [this] passage, describes the [activity of placing one branch of a date palm upon another]: 'a soft branch (of the flower cluster) of the male date palm is placed in the split (of the flower cluster) of a female palm. . . .' After this excursion to the Talmud we should be justified to return to our . . . two paragraphs of the Code and insert [for *rukkubu*(*m*)] *to pollinate*.[288]

If we decide that the Babylonian Talmud's description of 'placing one branch upon another' means placing a sprig of a male flower cluster on top of a female flower cluster, then we could have here some form of the modern 'inserting/tying' method. The rabbi's commentary of course goes even further in that direction, actually describing the male 'branch' as 'soft' [i.e., a sprig?] and as 'placed in the split' of the female palm. This kind of examination of an Akkadian text attempts to understand the actual steps involved in hand-pollination. Such analyses can help us decide whether it is accurate to apply our understanding of the 'inserting/tying' method to interpretations of other Akkadian texts.

There is also another artificial technique of pollination, but one that does not involve inserting, tying or shaking. Tylor had mentioned, and quickly dismissed, wind pollination as a natural means for fertilizing date palms. Botanists acknowledge that wind pollination must have been the only means of fertilization for a long time before hand-pollination was developed. But did wind pollination become a conscious means of pollinating palms at some point, so that it was perceived as an actual method? We are aware that by the first millennium BC the sexes of date palms were known.[289] Philologists have taken this to mean that hand-pollination was therefore known and practiced. But knowledge of the sexes of date palms could well have been used instead to situate a number of female palms around a male tree, especially for purposes of pollination by wind. Wind pollination constitutes a conscious method of fertilization as long as farmers know which trees are male, which are female, and where to place each accordingly.

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[287] Pruessner, 1920, p. 225. Later commentaries on the term concur with this interpretation. See, e.g., Landsberger, 1967, p. 19, 'The semantic relation between *rikbu* and *rukkubu* "to fertilize," German "befruchten," is that of the Arabic *laqḥ* "pollen du palmier mâle" to *laqaḥa*. . . ."féconder un palmier."' See now the entry for '*rakābu*' in E. Reiner et al., eds., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 14, *R*, Chicago, 1999, esp. p. 89 ('*rukkubu*'); and Black et al., eds., 2000, p. 296, '*rakābu*,' in D-stem (*rukkubum*), 'fertilize palm-grove' (and p. 307, '*rukkubum*,' 'fertilized of date palm, orchard').

[288] Pruessner, 1920, pp. 225–26 (emphasis his). Rashi is known as an outstanding Biblical commentator of the Middle Ages (1040–1105). Note that the words in parentheses in Rashi's quote are Pruessner's own interpretation, 'The words in parantheses are inserted by [me] to show what really took place. Rashi evidently knew in a general way of the significance of pollination for the growing of dates, but was lacking in exact knowledge. . . .' Ibid., p. 225, n. 3.

> . . . it is stated that in a palm-grove of natural growth the female trees do not produce if there are no males, and that each male tree is surrounded by several females with more attractive foliage that bend and bow towards him; while the male bristling with leaves erected impregnates the rest of them by his exhalation and by the mere sight of him, and also by his pollen; and that when the male tree is felled the females afterwards in their widowhood become barren.[290]

Perhaps texts can help us determine the distribution and placement of male and female palms in a given Mesopotamian orchard. If this kind of data exists, we might be in a position then to argue that wind pollination constitutes another possible method of fertilization used by Mesopotamian farmers—and one that possibly was used in combination with other methods.[291]

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[289] The first millennium BC lexical list ur$_5$-ra = *ḫubullu* records the word *sissinnu* in relation to the date palm, which means 'date palm flower cluster.' Initially see Meissner, 'Assyriologische Studien, Die dritte Tafel der Serie ḫarra = *ḫubullum*,' *Mitteilungen der vorderasiatischen Gesellschaft* 18 (1913), p. 23, lines 63–64; now see Landsberger, 1967, p. 18; and p. 2, where he noted that 'male palm' and 'female palm' occur together in lines 319–20 of the lexical list. See also the entry for '*sissinnu*' in Reiner et al., 1984, pp. 325–26, 'date spadix.' Consider Popenoe, 'The Pollination of the Date Palm,' *Journal of the American Oriental Society* 42 (1922), pp. 343–54, where Popenoe surveyed the Classical Arabic terms for the male palm and its sexual parts (pp. 344–45, 349–51), and the female palm and its sexual parts (pp. 345–48). More recently, see D. Cocquerillat, *Palmeraies et cultures de l'Eanna d'Uruk (559–520), Ausgrabungen der Deutschen Forschungsmeinschaft in Uruk-Warka* 8, Berlin, 1968, p. 32.

[290] Pliny, *Natural History*, 13.7.34–35.

[291] E.g., see Cocquerillat, 1968, p. 34, who endorsed the 'inserting/tying' method and thought it was used by Mesopotamian farmers in combination with wind pollination. She based her evidence for the use of wind pollination on a Neo-Assyrian astrological text, 'Pendant ce laps de temps le vent, et surtout la pluie entravent l'opération en empêchant le pollen de se fixer sur le pistil; une brise légère, au contraire, la favorise: "Si le 13 nisan (?) (le soleil et la lune apparaissent simultanément) le vent du nord viendra en son temps; pour les arbres la fécondation se déroulera correctement; arbres fécondés, fruits dans tout le verger; cette année-là dattes et vignes réussiront." Précisément, d'après les Bulletins météorologiques de la Basrah Petroleum Company, (cités par G. Roux, *Revue d'assyriologie et d'archéologie orientale* 55 (1961), p. 18) en 1957 les vents ont soufflé du nord-ouest ou du nord-est 22 jours en mars et 17 jours en avril et en 1958, 18 jours en mars et 19 jours en avril.' Cocquerillat cited Thompson's edition of this text; see *The*

As the debate now stands, and given the evidence routinely provided, we are unable to prove or disprove whether and how Mesopotamian farmers hand-pollinated their palms. When we consider that even the scholars who discuss such issues do not yet agree on the pollination method used (e.g., Tylor and Porter endorse the 'shaking' method, while Pruessner and Cocquerillat endorse the 'inserting/tying' method), it is clear the question is still open for debate. Much like the history of the question of climate conditions, the history of the fertilization question does not help us decide the meaning of the genies' activity in figs. **1–2**.

Perhaps other evidence, or even a fresh look at the old evidence, may move us forward in the fertilization debate. But I suspect that even so, we will remain at risk of seeing figs. **1–2** as scenes of artificial fertilization for some time to come. Pruessner's understanding of Mesopotamian hand-pollination, gleaned from certain passages of Hammurabi's Code as well as modern practice, put him in a good position to deny or at least question that fig. **1** portrays artificial fertilization. And yet he wrote,

> That artificial fertilization of the date palm was practiced during the period of the Assyrian Empire is certain from monumental evidence [i.e., fig. **1**].[292]

Pruessner's understanding of the texts—that is, pollination via the 'inserting/tying' method—contradicts Tylor's understanding of the images—that is, pollination via the 'shaking' method. And yet Pruessner endorsed Tylor's interpretation of fig. **1**. The power of Tylor's interpretation, as well as the momentum his interpretation had gathered by this time, must have exerted itself over Pruessner's understanding of the imagery.

Reports of the Magicians and Astrologers of Nineveh and Babylon in the British Museum, ed. R. C. Thompson, vol. 2, *Luzac's Semitic Text and Translation Series,* London, 1900, p. lvi, no. 123, 'When a north wind prevails and blows, prosperity will come to all fruit trees. The Igigi gods will be at peace with the land: the land will see abundance. This year dates and grapes (?) will prosper. The Moon appeared on the thirtieth of Tisri: from today as far back as Elul, which has passed, on the thirteenth day the Moon has not been seen with the Sun. When the Sun reaches the zenith and the sky is dark, years of prosperity, the king will grow strong. From Nírgal-íṭir, son of Gašuzu (?)-Tutu.' See H. Hunger's more recent translation of this text in Hunger, *Astrological Reports to Assyrian Kings, State Archives of Assyria* 8, Helsinki, 1992, pp. 147–48 (RMA 123).

[292] Pruessner, 1920, p. 224.

11 Similarity and symbolism

Early twentieth-century date palm theorists applied the claim of similarity to various features of the AST. Ward had thought that the genies' 'cones' represented bunches of dates, and this helped him to an identification of the AST as a date palm.[293] Von Luschan had interpreted the vertical 'pole' element of the AST as a stylized form of a palm trunk, the palmette crown of the AST as a stylized version of palm leaves, and the volutes upon which the palmette crown of the AST sits as stylized fruiting bunches of dates.[294] It was along these same lines that the brothers Erwin and Reinhold Wurz traced the origins of what they referred to as three sets of 'horns' appearing on the 'trunk' of the AST to palm fronds.[295] In each of these cases, scholars attempted to prove that the AST represented a date palm by comparing parts of the AST with parts of an actual date palm.

This kind of matching between AST parts and date palm parts was motivated by the perception that AST parts represent 'stylized' versions of natural-looking date palm parts. Scholars writing in the 1920s adopted this approach. Unger had understood the AST as a stylized date palm based on the stylistic analyses of Reinhold Wurz's *Spiral und Volute*.[296] Wurz had tried to trace the origins of the Ionic and Corinthian capital to ancient Near Eastern and Mediterranean artistic efforts at depicting stylized and natural date palms. Underlying Unger's comparison between features of the AST and date palm is the basic belief that the origins of the AST design are to be found in the date palm.

> Die stilisierte Palme geht auf die Dattelpalmen mit ihren Früchten zurück, die ornamental ausgestaltet sind. Den Grundstock bildet der Palmstamm unten mit gerollten Fußblättern, oben mit einer kolbenartigen Anschwellung des Palmkopfes. Um den Kopf gruppieren sich die Blütenkolben, die mit den vom Fuß aufsteigenden Blütenkolben durch Bänder verbunden sind.[297]

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[293] Ward, 1910, p. 222, 'It will be noticed that the fruit in these utterly conventional representations looks like pine cones, but it is rather to be thought of as the bunches of dates hanging from the tree.'

[294] Von Luschan, 1912, pp. 22–29, 34–35.

[295] E. and R. Wurz, *Die Entstehung der Säulenbasen des Altertums unter Berücksichtigung verwandter Kapitelle, Zeitschrift für Geschichte der Architektur 15,* Heidelberg, 1925, pp. 32–33.

[296] See Unger, 1926, p. 261, and R. Wurz, *Spirale und Volute von der vorgeschichtlichen Zeit bis zum Ausgang des Altertums, Mit besonderer Berücksichtigung des ionischen und des korinthischen Kapitells,* Bd. 1, Münich, 1914, p. 64, and passim.

[297] Unger, 1926, p. 261.

Such comparisons were based on the AST-type seen in figs. **1–2**. But Unger also based his comparisons upon an AST and date palm seen together on the Black Stone (fig. **3**): he described the large AST on the top register as an example of a stylized version of the natural-looking date palm seen on the bottom register.[298] However, the large AST seen on the Black Stone differs from the ones seen on Aššurnasirpal II's palace walls: on the Black Stone the large AST's 'branches' terminate in 'cones,' whereas on the palace walls they terminate in palmettes.

It became common from this period onwards to assimilate all the various AST-types with the one type seen in figs. **1–2**, that is, to find the basis for all these various types in the version seen on Aššurnasirpal's walls.[299] Since date palm theorists thought that all the various AST-types had their origin in the version seen in figs. **1–2**, and since they also thought that the AST seen in figs. **1–2** had its origins in the date palm, they then thought all the different versions of the AST also had their origins in the date palm. Hence, all the different versions of the AST represent stylized date palms. Even where specific differences exist among these types—for example, 'branches' terminating in pomegranates, 'cones,' or spheres instead of palmettes, or the 'trunk' made up of superimposed spheres instead of a chevron-decorated pole—scholars still saw the origins of these types in Aššurnasirpal II's AST of figs. **1–2**. Louis Speleers, philologist and curator of the Musée du Cinquantenaire, Brussels, argued this point in his comparison of the ASTs seen in figs. **37** and **1**. Not only did he argue that the AST seen in fig. **37** represents a stylized date palm, but he thought it represented a stylized version of the stylized date palm seen in fig. **1**.[300] The philologist Erich Ebeling also thought the date palm was the basis for the different versions of the AST appearing in Neo-Assyrian art.[301] Ebeling based his opinion upon Weber's catalogue of seals, where Weber had identified the AST seen in fig. **1** as a stylized date palm and had grouped different types of ASTs together with it, believing they all represented variations on the same theme of a date palm.[302]

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[298] Ibid., p. 261, 'Die Denkmäler unterscheiden genau die Naturpalme und die stilisierte Palme. Beide kommen auf dem schwarzen Steine des Asarhaddon nebeneinander vor. . . .'

[299] This perspective finds its most detailed expression in Danthine, t. 2 (plates), 1937; C. Kepinski, *L'arbre stylisé en Asie occidentale au 2ᵉ millénaire avant J.-C., Bibliothèque de la Délégation Archéologique Française en Iraq* no. 1, *Travaux du Centre de Recherche d'Archéologie Orientale-Université de Paris* 1-no. 1, *Éditions Recherche sur les civilisations, Cahier no.* 7, t. 1, Paris, 1982; and Parpola, 1993, appendix A (which is based in part on Danthine, t. 2, 1937).

[300] L. Speleers, 'Une scène d'adoration assyrienne,' *Bulletin des Musées Royaux d'Art et d'Histoire Parc du Cinquantenaire, Bruxelles*, troisième série, no. 3 (May 1929, pp. 62–63, describing fig. 37), 'On le rend d'ordinaire par un palmier aux branches plus ou moins stylisées et chargé parfois de quelques régimes; ici la stylisation est poussée au point de déformer le motif original; le lecteur aura de la peine, en effet, d'y reconnaître un palmier. En réalité, il se compose de six rhombes superposés; leurs extrémités sont terminées par une sphère et réunies par une médiane. Cinq sphères centrales forment le tronc de l'arbre, tandis que les rhombes constituent les branches. Il est aisé de trouver les formes intermédiaires entre l'arbre proprement dit et cette superposition quasi géométrique de rhombes, aussi bien dans la grande sculpture que dans la gravure qui n'en est qu'un dérivé. Si nous examinons quelques bas-reliefs du IXᵉ siècle, par exemple, représentant l'hommage à l'arbre sacré (Budge, 1914: pl. XI) [=our fig. **1**], nous constatons que deux branches correspondantes sont réunies au tronc par des lignes ondulées et que le groupe ainsi obtenu forme un rhombe dont les deux extrémités se terminent par un bouquet de feuilles de palmier. Que trouvons-nous sur les gravures? Exactement le même motif, mais

Drawing heavily on the claim of formal similarity, Andrae also argued that the AST seen in figs. **1–2** represents a stylized (literally 'conventionalized') date palm. His analysis of the wall paintings at Kar-Tukulti-Ninurta led him to argue that the ASTs represented there were the direct forerunners to the AST seen in figs. **1–2**.[303] His comparison between figs. **18** and **1–2** produced the following observation.

> Patterns based on plant forms [at Kar-Tukulti-Ninurta] are founded almost exclusively on the date palm and pomegranate. . . . The date-palm supplies the model for palmettos [palmettes] a thousand times represented and altered in various ways. . . . In the most extravagant designs the palmettos come to an end in the so-called *tree of life* [e.g., fig. **18**], underlying which, in my opinion, is the idea of a palm-grove with a brook flowing through it. . . . The remarkable bands, which are always broad and undulating, and go outwards from the stem to the outermost wreath of palmettos, and often cross each other, seem to me to represent not branches but water. They remind me more of brooks flowing out from the god of waters than of plant stems.[304]

Here Andrae has likened what had been described as 'branches' of the AST, or the supports that connect the 'trunk' with the arborlike structure surrounding the trunk and palmette crown, to water flowing around the AST. The form of the 'branches' seen on ASTs had reminded him of representations of water flowing from vases held by deities.[305]

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rendu schématiquement: les ondulations et les branches sont devenues rectilignes et les feuilles, des sphères. Quant au tronc, ou plutôt à l'écorce, elle est indiquée par plusiers sphères superposées.'

[301] E. Ebeling, 'Heiliger Baum,' *Reallexikon der Vorgeschichte* 1 (1924), p. 371, '[Die Dattelpalme] ist . . . deren Gestalt dem "heiligen Baume" der bildlichen Darstellungen zugrunde liegt, wenn auch in oft recht starker Stilisierung.' Also Ebeling, 'Baum, heiliger,' *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* 1 (1932), p. 435, 'Der sogennant Lebensbaum der bildlichen Darstellungen ist eine stilisierte Palme, die ein ebenfalls heiliger Baum ist.'

[302] See Weber, Bd. 1, 1920, pp. 118–20; and Bd. 2, 1920, pp. 95–97, Abb. 473–87.

[303] Andrae, 1925, p. 4, 'The forms at Kar-Tukulti-Enurta are an important intermediate stage in the development of Assyrian decorative art. In my opinion true Assyrian art arises in the middle of the second millennium.' And p. 16, discussing the AST-like images on the walls (e.g., our fig. **18**), 'We have here the earliest example so far found of this remarkable form (the well-known early Assyrian so-called *tree of life*. . . .)' (emphasis his).

[304] Ibid., p. 5 and n. 1.

[305] Andrae cited a cylinder seal of Gudea that shows an enthroned Ea/Enki holding a vase that supports a plant, with streams of water flowing from the vase. See, e.g., Weber,

Andrae's specific claim of formal similarity concerning watercourses was developed by the art historian and archaeologist Edith Porada twenty years later.

> When we look a little closer at this sacred tree which the demons fertilize [e.g., fig. 2] . . . we find that it is really composed of different elements. In the center is the palm, its stem rising between sepals and opening into an imposing crown at the top. Represented as if seen from above, undulating water courses surround the palm tree in the manner of irrigation canals. At regular intervals they form volutes, which from this time onwards are never absent from representations of water on the monuments of Assyrian kings. It is possible they were intended to represent whirlpools. Numerous palmettes, the offshoots of the larger tree, grow at the points where the canals meet. The stem and crown of the palm tree and its palmettes are all marked by a chevron pattern which differentiates them from water courses.[306]

Porada's description is reminiscent of Tylor's idea that the AST of fig. 2 portrays a date palm grove. Although her interpretation accounts for only one date palm whereas Tylor's accounted for an entire grove, both Tylor and Porada based their perspectives on something approaching a bird's-eye view of the AST.[307] Porada interpreted the so-called branches or supports as irrigation canals. Such canals existed in actual date palm groves of southern Mesopotamia in the second and first millennium BC. If the AST does represent a date palm, then Porada's suggestion is an attractive one. Date palm theorists have been drawn to it for over half a century and continue to quote it as support for a date palm interpretation of the AST.[308]

Bd. 2, 1920, p. fig. 432; L. Delaporte, *Catalogue des cylindres orientaux et des cachets assyro-babyloniens, perses, et syro-cappadociens de la Bibliothèque Nationale*, t. 1, Paris, 1910, T-108, 'Seal of Gudea of Lagash'; and Frankfort, 1939 (1965), p. 143, fig. 37.

[306] E. Porada, catalogue entry for pls. V–VII, 'Griffin Demons,' 'Genii and Griffin Demons,' in *The Great King, King of Assyria: Assyrian Reliefs in the Metropolitan Museum of Art*, New York, 1945, p. 32.

[307] This bird's-eye perspective of the AST has most recently been expressed by A. T. Shafer, who followed Tylor's view (see Tylor, 1890, p. 392) that the painted band of rosettes at Khorsabad (our fig. 17) represent highly stylized versions of trees. See Shafer, 'The Carving of an Empire, Neo-Assyrian Monuments on the Periphery,' Ph.D. diss., Harvard University, 1998, pp. 75–76, n. 95, '. . . at Khorsabad, Room K . . . it appears that both the circular and star-shaped bosses may simply be stylized trees seen from above. That these images are analogous to trees is indicated by the presence of flanking *apkallu*s and bulls.' For a full reconstruction of these painted bands, see G. Loud and C. B. Altman, *Khorsabad, Part II, The Citadel and the Town*, University of Chicago Oriental Institute Publications, vol. 40, Chicago, 1938, pls. 88–90.

[308] See, e.g., Mallowan, 1983, p. 38, 'Andrae, in discussing the palmette tree of the frescoes, likened the undulating bands linking the tree trunk and the outermost band of palmettes to streams of water. Edith Porada enlarged on this idea in her discussion of the "tree" of the Northwest Palace reliefs of Aššurnasirpal II; she suggested that it represented the palm as seen from above with surrounding water courses.' See also D. Collon, *Ancient*

It is true that irrigation canals were a necessary feature of date palm groves. It may also be true that the supports or 'branches' of the AST have a form similar to that of streams of water carved in relief and on seals. This does not mean that the 'branches' of the AST represent irrigation canals. A predisposition to view the AST as a representation of a date palm inspired the irrigation canal idea; that is, the irrigation idea is wholly dependent upon seeing the AST as an image of a date palm.

The arbitrariness of identifying these supports or 'branches' as irrigation canals is evident from the interpretations of other date palm theorists. For example, Garlick saw these supports or 'branches' in fig. **2** as festoons.

> . . . a complex system connecting together what may be called a grove of palmettes. Certain incised lines plainly show that these festooning bands are of some woven fabric.[309]

We might expect this kind of interpretation from a pole theorist, recalling as it does the idea of a decorated May-pole, but it is significant that it is put forward by a date palm theorist.[310] Her idea of stringing ribbon around a palm grove for a fertility rite, where the large male palm is linked by festoonery to the females, represented as palmettes, standing at the edges, is as possible as Andrae's or Porada's watercourse/irrigation canal explanation for the supports or 'branches.' How do we decide whose explanation is more plausible without the aid of texts explaining fig. **2** or without any images of actual irrigated or festooned date palm groves?

The main drawback to using any of the claims of formal similarity for a date palm identification of the AST is the subjective nature of these claims. Date palm theorists can and do rely on the rationalization that AST images are simply very stylized versions of actual date palms, where 'very stylized' means 'wholly abstracted.' Garlick admitted as much, when she commented further on her festoonery idea.

Near Eastern Art, Berkeley, 1995, p. 132 (discussing our fig. **1**), 'It is also possible to view the tree as the map of a well-irrigated garden with a main canal (the trunk) and side-channels (the branches) watering individual plants. It was certainly a symbol of the well-being of the country and its fertility. . . .'; and Collon, 2001, p. 83 (discussing the 'Ashurnasirpal-type tree' = our figs. **1–2**), 'It has been suggested that the Ashurnasirpal-type tree can be seen as the plan of a garden, with a central waterway linked to plants by a network of canals.' Most recently, see Winter, 2003, p. 253 (discussing our fig. **1**), 'E. Porada long ago suggested that the spirals and curlicues extending the tree beyond its trunk represented schematized watercourses. Their termination in what we call *palmettes* emanating from the central stalk would then signify new growth, mirroring the crown of the tree where new fronds appear and curve downwards as volutes' (emphasis hers).

[309] Garlick, 1918, p. 112.

[310] In fact Pering adopted Garlick's interpretation of these supports or 'branches' to support his pole theory. See Pering, 1932–33, p. 289, and n. 77, where he cited Garlick, 1918 (this passage is quoted in chapter 8 above).

> It needs, perhaps, some stretch of imagination to see here the picture of a male-flowered palm growing in the midst of a grove of female-flowered trees, all festooned together for the festival with loops and ends of drapery, in origin a necessity but now merely an adornment.[311]

Garlick wrote this after comparing the AST in fig. **2** with her own rendition of a 'realistic date palm,' labelled 'fig. 1' in our fig. **38**.[312] Her reservations, and some of our own, prompt a discussion now concerning the relation between actual date palms, depictions of actual date palms and ASTs.

The leaves of living date palms appear either fan-shaped or feather-shaped. The difference can be seen in fig. **39**, where the drawing on the left represents a fan-shaped palm and the one on the right represents a feather-shaped palm (these terms describe the shape and splay of the fronds). In Iraq, the feather-shape type of leaf predominates (as in fig. **40**).[313] The leaves are plicate (folded) and expand like an accordion when mature. Each individual leaf resembles a spike and together with hundreds of other leaves makes up a feathery frond. According to the tree's age and other factors, the fronds splay themselves in various ways, creating different arrangements (compare figs. **39–40**). The feather-shaped palm is apparently the one represented in Garlick's drawing as 'fig. 1' (fig. **38**), although her drawing lacks verisimilitude to actual date palms.

It is common for scholars to use depictions of feather-shaped palms from Neo-Assyrian reliefs as the basis for the claim of similarity between date palms and the AST. Our earliest examples of the AST carved in relief come from the palace of Aššurnasirpal II. Significantly, the one depiction of a date palm we have from his reign looks nothing like the example Garlick reproduced in drawn form.

So far as I am aware, fig. **41** (and a drawing of the same relief in fig. **42**) represents our only extant example of a date palm carved in relief dated to the reign of Aššurnasirpal II.[314] We recognize it as a date palm because of the spiky leaves that make up the fronds (cp. fig. **40**), the splayed arrangement of the fronds (cp. fig. **39**), as well as the characteristic bunches of dates dangling on either side of the trunk, which has a textured bark. We can see from his drawing that Layard recorded the imbrications as chevrons.

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[311] Garlick, 1918, p. 112.

[312] Ibid. As she does not indicate otherwise, the drawing labelled 'fig. 1' in our fig. **38** appears to be Garlick's own rendition of a date palm.

[313] See, e.g., 'Abd al-Wahhab Dabbagh, *On the Date Palms and Dates of Iraq*, Baghdad, 1969, passim and 'Abd al-Latif Wakid, *al-Nakhil*, al-Qahirah, 1973, passim; as well as any number of websites featuring Iraq and date palms, e.g., www.geocities.com/iraqinfo/sum/southern-iraq/karbalapic. For good photographs of the feather-type palm in the Middle East, see now Potts, 2002, passim.

[314] See Bleibtreu, 1980, pp. 24–26, Abb. 1, who listed only this relief as an example of a date palm dated to the reign of Aššurnasirpal II.

This style of spiky leaves, as well as the splayed arrangement of fronds, appears elsewhere in Neo-Assyrian carving. Compare two cylinders on which we see the same style of representation (figs. **43–44**).[315] This style of representing a date palm conveys the characteristic features of that tree, without precisely imitating them. I would, therefore, describe these representations as 'schematized' or even 'stylized' versions of a date palm. If these constitute 'schematized' versions of a date palm, what then is the AST, which looks entirely different? I suspect this is why late date palm theorists must describe the AST as a stylized version of a stylized date palm.

The comparison between an AST and a 'realistic' date palm in fig. **38**, put forward by Garlick, deserves further analysis. Where does her 'realistic' drawing of a date palm come from? Clearly not from nature, as we can see when we compare it with figs. **39–40**; and clearly not from Aššurnasirpal II's palace, as we can see when we compare it with figs. **41–42**. Rather, her drawing seems to be inspired by date palms depicted in reliefs following the reign of Aššurnasirpal II. If this is so, then her comparison is historically flawed. The type of 'natural-looking' date palm featured in fig. **38** occurred on Neo-Assyrian reliefs from, for instance, the reigns of Tiglath-Pileser III and Sennacherib (see figs. **45–48**). We might assume that date palms styled in the manner of these later kings also appeared during the reign of Aššurnasirpal II. However, this must remain an assumption as our only example of a date palm depicted during the reign of Aššurnasirpal looks nothing like the style of date palm depicted during the succeeding reigns. We should therefore be aware that when we use the claim of formal similarity for comparisons such as fig. **38**, we are actually comparing the AST seen on Aššurnasirpal's walls with natural-looking date palms seen on the walls of later kings.

Continuing with the issue of historical context, I think the AST seen on Aššurnasirpal's walls compares better with other figures seen on his own walls than with naturally depicted date palms seen on the walls of later kings. Take, for example, the shape and decoration of the 'trunk' of the AST. It more closely matches poles used to hold up Aššurnasirpal's canopy than it matches the trunk of a natural-looking date palm (compare the AST in fig. **49** with fig. **50**). Layard's drawing of the canopy and poles, corroborated by the actual relief, shows three poles decorated in the same manner as the AST: (1) the sides of the pole are depicted in outline form; (2) inverted chevrons are placed on top of each other along the length of the pole; (3) at the top of the pole is a triple superimposed band supporting a scalloped pair of half-volutes. The only similarity between the 'trunk' of the AST and the trunk of the naturally depicted date palm in fig. **42** is that both are decorated with chevrons—however, the chevrons decorating the 'trunk' of the AST are inverted, whereas those of the date palm are not.

Another instance where the AST on Aššurnasirpal's walls compares better with figures from that same palace than with naturally depicted date palms carved in the later reigns concerns the palmette. Literally meaning 'small palm,' the palmette was given its name by modern scholars. We do not know what the palmette meant to those who lived during the Neo-Assyrian period, nor have we any idea what name they gave it. For the most part, we have assumed that the palmette's design was derived from actual palm fronds. It has therefore been repeatedly asserted that the crowning palmette feature of the AST demonstrates, by way of the claim of formal similarity, that the AST represents a date palm.[316]

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[315] For a photograph of our fig. **44**, see Porada, vol. 1, 1948, pl. 118, fig. 774.

When we look closely at a palm frond, we see that it is composed of two symmetrical sets of individuated spiky leaves; and that the two sets together form a chevron pattern; and that each frond is made up of hundreds of these chevrons (see fig. **40**). The palmette crowning the AST is similar to the basic form of naturally depicted palm fronds (cp. figs. **49** and **45**). However, there are differences. Each frond in fig. **45** has numerous chevrons placed closely together. Each 'frond' of the palmette crown of the AST in fig. **49** has inverted chevrons with considerable space in between.

We can find better comparisons for the palmette crown of the AST from Aššurnasirpal's own reliefs rather than having to turn to the naturally depicted palm fronds featured on the reliefs of later monarchs. AST-palmettes are similar in shape and decoration to other palmettes appearing on Aššurnasirpal II's walls. For example, human-headed genies hold a 'palmette-branch' in one hand and a deer in the other (see the relief in fig. **51** and a drawing of the same relief in fig. **52**). The 'palmette-branch' featured here has not yet been identified as a representation of an actual plant or tree part; rather, it has been considered a stylized form heavily influenced by natural date palm fronds.[317] When we compare a slab depicting another human-headed genie that holds an ear of wheat in one hand and an ibex in the other (fig. **53**), we begin to wonder whether our identification of the 'palmette-branch' as stylized palm fronds is accurate.[318] Such a comparison shows that a marked symmetry exists between the two slabs. Both genies hold an animal, which we take to be a representation of an actual creature. One of the genies also holds an ear of wheat, which we take to be a representation of an actual plant found in nature. The question before us then is do we carry our interpretation of the 'palmette-branch' to its logical conclusion based on this symmetry between the two slabs? That is, do we interpret the 'palmette-branch' as an actual plant found in nature, as we have interpreted the other objects presented as offerings by the genies?[319] If we do decide that this kind of interpretation makes sense, then we should acknowledge that fig. **51** portrays a genie holding a plant form that is a plant in its own right, and not one derived from or representing a stylized version of another plant. The AST-palmette of fig. **49** has close formal parallels with the plant form depicted in fig. **51**. This comparison could be used to support the argument that the AST-palmette is not a symbol or stylized version of something else but a representation of the plant form shown in fig. **51**.

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[316] See, e.g., P. Albenda, 'Assyrian Carpets in Stone,' *Journal of the Ancient Near Eastern Society of Columbia University* 10 (1978), p. 9, 'The palmette has its origins in the naturalistic representations of the date palm tree, seen on Middle Assyrian seal impressions. By the 9th century BC it became stylized and evolved into the sacred tree type utilized frequently on the wall reliefs from Nimrud.' Also Mallowan, 1983, p. 38, 'It seems likely . . . that Tukulti Ninurta's artists, who designed the frescoes on the walls of the new palace at Kar-Tukulti-Ninurta and created the intricate banded palmettes of the "sacred tree," derived their inspiration from the date palm.' And Porter, 1993, p. 133, 'In the large carvings in the Northwest Palace . . . the designer seems to have gone to some lengths to present his stylized tree as a date palm, always topping the central trunk with a clearly recognizable palmette, and always surrounding the trunk with smaller palmettes, emphasizing the link to date palms. This emphasis suggests that in the Northwest Palace the date palm was essential to the Assyrians' understanding of the scene.' Also see Albenda, 1994, p. 132, 'Although the sacred tree of the stone reliefs varies in style, one important feature is the palmette. The palmette crowning the trunk may indeed represent the fronds of a palm tree rendered in decorative fashion. . . . The trunk may represent the pedestal upon which the flower rests and, together, the palmette and stand are shaped to resemble a palm tree. . . .' And Winter, 2003, p. 254, 'The "palmette" motif, which may be seen as a substitute for the full-scale living palm or the [AST]. . . .' Exceptionally, see B. Hrouda, 'Zur Herkunft des assyrischen Lebensbaum,' *Baghdader Mitteilungen* 3 (1964), pp. 41–51, who thought that the origins of the AST-palmette were to be found in the papyrus.

These AST-palmettes with their inverted chevrons and voluted supports appear elsewhere on Aššurnasirpal II's reliefs as entities placed at the edges of scenes (fig. **54**), and at the edges of the king's garments (figs. **55–56**), approached by creatures. Fig. **57** offers a comparison to such scenes: a drawing of this seal's impression shows two men approaching a palmette-type plant in what appears to be a scene of worship. The execution of this palmette type is closer to the spiky palm leaves seen in figs. **43–44** than what we see in figs. **54–56**. Again, perhaps these different groups of images represent the worship of two different plant forms—where fig. **57** shows a stylized symbol of a palm and figs. **54–56** show something else. Or maybe they are all meant to show the same thing. The point here is that we can only come to that kind of conclusion after a thorough pre-iconographic analysis of the palmette, and also of the AST.

If we wish to understand late twentieth-century date palm theorists, that is, how and why their views developed as they did into seeing the AST mainly as a symbol of an abstract concept such as fertility or abundance, we need to turn to the work of archaeologists Nell Perrot and Hélène Danthine. Both scholars produced summaries of AST scholarship that stand out as the first and only attempts to collate all the scholarly interpretations of the AST up to the point of their publications in 1937. Their work is also valuable for the considerable amount of visual data presented alongside their interpretations: Perrot presented 140 separate images and Danthine presented 1,217.

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[317] Bleibtreu, 1980, pp. 38, 60, does not identify the 'palmette-branch' as a botanical species. Mallowan, 1983, p. 38, stated that this plant type defies botanical identification but then suggested it might represent a palm offshoot.

[318] However, see Mallowan, 1983, p. 38, who described the genie's 'ear of wheat' as a palm frond. Since this relief slab was mutilated at the top (probably in the nineteenth century for packing and shipping purposes), we do not know what the tip of this plant form looks like.

[319] See Albenda, 1994, p. 132, where she also proposed a botanical identification for the palmette, '. . . the palmette may represent the cross-section of a flower of the *Compositae* Family, or perhaps the *Rosaceae* Family; the rosette, a motif common in ancient Near Eastern art, also derives from a flower of the *Compositae* family.'

Danthine and Perrot are generally treated as reference works on the history of AST scholarship and are often cited as short-hand for all the late nineteenth- and early twentieth-century interpretations of the AST. Since their works are considered to be compendia of roughly the first century of AST interpretations (1849–1937), late twentieth-century scholars tend to cite Perrot and Danthine (but especially Danthine) to the near exclusion of all other scholars who wrote about the AST up to that point—even though earlier scholars played much more important roles in shaping the debate. So, for instance, the footnotes of late twentieth-century scholars referring to AST studies will routinely cite Danthine and/or Perrot but not Bonavia or Tylor.[320]

Relying on either Perrot's or Danthine's work as a general compendium of AST interpretations that objectively records late nineteenth- to early twentieth-century opinions of the AST is misguided. Neither scholar saw herself necessarily as an historian of AST scholarship, that is, as charged with the task of recording all the various views in order to weigh their validity. Both scholars were immersed in the mainstream interpretations of their day and started from the premise that the AST represented a stylized date palm. Each scholarly opinion that they recorded and each image that they evaluated was assessed as to whether and how it supported a date palm identification for the AST.

Perrot's and Danthine's views emerge clearly from the structure of their books. Perrot structured her analysis as a chronological examination of tree representations that date from the fourth to first millennium BC and that appear in ancient Near Eastern contexts. Her view that the AST represented a stylized date palm developed out of her stylistic analyses of these tree representations. Her conclusion that the design of the AST was derived from an actual date palm is based on the claim of similarity, following the arguments of Bonavia and Ward.[321]

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[320] See, e.g., York, 1972–75, pp. 270, 281 (Danthine); Lambert, 1985, p. 437, n. 11 (Danthine); D. Castriota's annotated notes to Riegl, 1893 (1992), pp. 325 (Danthine, Perrot), 326 (Danthine); Albenda, 1994, p. 123, n. 8 (Danthine). This situation finds a parallel with scholars who presently cite Parpola, 1993, as the last or most recent word on AST studies as a work containing relevant AST-related bibliography. See, e.g., Collon, 2001, p. 62, 'The meaning of the [AST] has most recently been discussed by Parpola [1993], (with full bibliography). . . .' (Further, see our n. 41.) Parpola, 1993, p. 161, nn. 1 and 5, cited little AST bibliography beyond York, 1972–75; Kepinski, 1982; and Danthine, 1937; therefore Parpola's highly selective bibliography does not reveal the range of AST interpretations. Rather, his bibliography reiterates the mainstream interpretation that the AST represents a stylized tree. Furthermore, the debates embedded in a date palm identification, e.g., the question of the genies' activity around the AST or the question of whether all AST-types represent one particular tree, are ignored by Parpola's selective bibliography.

Danthine also conducted a formal survey of plant and tree forms that appeared during the fourth to first millennium BC in order to demonstrate how the AST evolved out of earlier floral representations.[322] Danthine's study, like Perrot's, was motivated by the idea that the AST was the end product of a stylistic evolution in tree and plant forms, which began in the fourth millennium BC with natural-looking floral forms and which developed over time into more schematic designs. For Danthine, every version of the AST could be traced back to the date palm, and, in this way, she followed the claim of similarity argued by Bonavia. Danthine also adopted the arguments of Bonavia and Ward, who understood the AST as a stylized date palm that was being ritually attended to—not artificially fertilized.

Perrot and Danthine, however, moved away from the interpretations of Bonavia and Ward by deciding that the AST did not represent an actual date palm. Their movement away from earlier date palm theorists, who thought that the AST represented an actual tree, has been important for the kinds of interpretations expressed by mid- to late twentieth-century date palm theorists. Perrot's and Danthine's work advanced a symbolic interpretation of the AST that was not explicit prior to their publications yet became much more so afterwards.

Danthine expressed the idea that the AST was essentially a symbol of fecundity, whose variations in form each expressed the same idea of fertility. The completely artificial nature of the AST and its consistently flat representations helped Danthine to her conclusion that the AST could not represent a specific or actual object, such as a tree, but must represent a symbol of a more general idea.

> Dans l'iconographie de l'Asie occidentale ancienne, l'arbre sacré est essentiellement un symbole de fertilité et de fécondité, ces deux idées étant étroitement liées. . . . Les Assyriens rassemblent en une . . . composition divers éléments: palmettes, grenades, bourgeons, réseau, liens, 'montagne' ou ziqqurat, qui tous expriment cette même idée de fertilité et, s'exaltant l'un par l'autre haussent ainsi la valeur bénéfique du symbole. . . . Né de plantes,

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[321] Perrot, 1937, pp. 106–10.

[322] Danthine's research project set out to demonstrate that the AST represents a date palm. She accomplished this not only through detailed stylistic analyses and summaries of previous AST interpretations like Perrot's, but also by including chapters on the distribution of date palms and the conditions necessary for growth and means of artificial fertilization; a formal study of other vegetal forms (as well as 'vegetation gods') represented in ancient Near Eastern art that helped support her basic premise that the AST-as-date-palm also represented fecundity and fertility more generally speaking; and a stylistic analysis of 'the sacred tree' in the art of Egypt, Cyprus and the Aegean world.

> il [l'arbre sacré] n'est cependent pas, comme l'*ashera* ou l'arbre de mai, un pieu plus ou moins enrichi d'ornements. Composé d'éléments végétaux, il est essentiellement plat et destiné à être surtout reproduit en gravure, peinture, bas-relief ou dans des matières telles que l'ivoire ou le métal. . . . Ce n'est pas la copie d'un arbre réel plus ou moins enrichi d'ornements, mais bien une stylisation entièrement artificielle et, plutôt qu'un véritable objet cultuel, il nous paraît être un symbole doué d'une grande puissance bénéfique. En fait, nos répresentations indiquent moins un culte de l'arbre qu'un culte de la végétation et, plus précisément, de la fertilité et de la fécondité. Tout, dans la composition des arbres sacrés, dans le choix des scènes, est en rapport avec cette idée et avec la valeur bénéfique et parfois prophylactique qu'on leur attribue.[323]

According to Danthine, the AST is a symbol of fertility and fecundity in part because it is so artificial, that is, because it does not, or cannot, represent a three-dimensional object, such as a tree or a pole.

Danthine thought that the AST represents a stylized date palm because a date palm symbol must have conveyed to its viewers a general notion of fertility and fecundity linked to vegetal abundance and vegetation worship. Therefore, the AST-as-date-palm represented vegetal abundance on a general level. For Danthine, to say that the AST is a symbol of fertility and fecundity is to say it represents, en masse, all plants and trees and the abundance associated with them. Perrot also subscribed to this understanding of the AST, but in less decisive terms.[324]

Perrot's and Danthine's ideas are embellished in the interpretations of the art historian Irene Winter, who has closely considered the meaning of the AST for the last twenty years.[325] In one of her most recent interpretations, Winter explained the entire design of the AST seen in figs. **1–2** as a

> temporal sequence and complex of ideas . . . [that] incorporates the trunk and branches of the living palm . . . with a lattice of immature trees that in nature bud off by underground shoots surrounding the parent. This new

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[323] Danthine, 1937, pp. 211–12, 163–64.

[324] See, e.g., Perrot, 1937, p. 132, '. . . à l'époque assyrienne, si l'on trouve encore l'ancien motif de l'arbre [sacré] nourricier tour à tour dévoré et adoré par les animaux, et formant à nouveau le centre de la scène, c'est surtout le thème, désormais classique, des génies entourant l'arbre de vie qui s'impose, marquant l'apogée d'une stylisation très ornementale. Ensemble dont on ne peut dégager complètement l'idée symbolique, mais qui, à en juger par la fréquence de ses représentations, constituait un des éléments essentiels de l'art à cette époque.'

[325] In particular, see Winter, 'The Program of the Throneroom of Assurnasirpal II,' in Harper and Pittman, eds., 1983, pp. 15–31, which has influenced a considerable number of late twentieth-century scholars on the meaning of the AST, and is often cited as the basis from which a number of scholars have begun their own analyses of the AST. Winter has consistently maintained that the AST represents an abstract symbol.

> growth happens along with the parent tree as the schematic surround of palmettes and this signals the full temporal growth cycle.[326]

Winter's idea, that the 'trunk' and palmette crown of AST represent the 'parent tree' and that the arch of palmettes represents its offshoots, owes a debt to Porada's interpretation, which itself was inspired by Andrae's 'watercourse' idea.

> In the center is the palm, its stem rising between sepals and opening into an imposing crown at the top. . . . Numerous palmettes, the offshoots of the larger tree, grow at the points where the canals meet. The stem and crown of the palm tree and its palmettes are all marked by a chevron pattern which differentiates them from water courses.[327]

Winter used the claim of similarity to partially support the idea that the AST represents the growth cycle of a date palm; and in particular she applied this claim to her understanding of the palmettes, which she likened to palm offshoots. To this extent, she found common ground with earlier date palm theorists. However, Winter's use of the similarity claim was not intended to further the idea that the AST represents an actual tree; rather, she used the claim to further the idea that the AST belongs to the 'symbolic realm.'

In her analysis of landscape imagery in ancient Near Eastern art, Winter isolated three types: 'referential,' 'symbolic' and 'narrative.' She assigned the Uruk vase and Aššurbanipal's 'Garden Party' or 'Banquet Scene' to the 'referential' category before discussing the AST.

> I would distinguish that 'referential' realm of the first two [examples, i.e., the vase and the relief] —field and garden—from the more 'symbolic' realm, as exemplified by the 'Assyrian tree' [AST]. There, a composite is based upon natural reality, the palm, but at the same time is constructed and abstracted to suggest simultaneously a temporal sequence and a complex of ideas. I would stress this difference from the more naturalistic and referential images [such as seen on the Uruk vase and Aššurbanipal's 'Garden scene']. . . . The 'symbolic' nature of [the AST] is precisely that it

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[326] Winter, 'Tree(s) on the Mountain, Landscape and Territory on the Victory Stele of Naram-Sîn of Agade,' in L. Milano, ed., *Landscapes—Territories, Frontiers and Horizons in the Ancient Near East, Papers Presented to the XLV Rencontre Assyriologique Internationale, Venezia, 7–11 July 1997,* pt. 1, *Invited Lectures, History of the Ancient Near East Monographs* 3/1, Padova, 1999, p. 67.

[327] Porada, 1945, p. 32. Winter acknowledged that Porada 'long ago suggested that the spirals and curlicues extending the [AST] beyond its trunk represented schematized watercourses.' (See Winter, 2003, p. 253.) However, Winter seems unaware that Porada also thought that the arch of palmettes surrounding the AST represents the offshoots of the 'parent tree,' a view now attributed to Winter. However, see Porter, 2000, p. 218, n. 13, who correctly attributed the offshoot and canal ideas to Porada.

> combines aspects that would not be observed combined in nature into a single schematic motif.[328]

We see here that Winter has drawn upon the claim of similarity—for exampe, the AST 'is based upon natural reality, the palm'—but qualified the claim by describing the design of the AST as 'a composite' and as 'constructed and abstracted.' Winter saw the AST as 'symbolic' versus 'naturalistic [or] referential,' and this perspective enabled her to put forward the idea that the AST represented the growth cycle of a date palm. Thus, for her, the AST represented a growth cycle, not an actual tree.[329]

Following this explanation of the design of the AST as representing a growth cycle, Winter claimed that the Assyrians themselves thought of the AST as a symbolic, abstracted, constructed and composite version of the date palm. She based this claim on the Nimrud 'earrings,' one of which shows a date palm and the other an AST.

> Lest it be thought that the Assyrians could not distinguish between the naturalistic representation of the [date palm] tree and the symbolic [version represented by the AST], I would draw attention to the glazed earrings found recently in one of the Queens' tombs at Nimrud, where the two representational modes are carefully and clearly differentiated.[330]

Winter compared two pieces of jewelry found in an eighth-century BC royal tomb located beneath the Northwest Palace at Nimrud. These pieces appear side by side on the cover of Joan and David Oates' most recent book on the history of the Nimrud excavations.[331]

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[328] Winter, 1999, p. 67.

[329] Building on Winter's 'cyclical' interpretation of the AST, see S. Richardson, 'An Assyrian Garden of Ancestors: Room I, Northwest Palace, Kalḫu,' *State Archives of Assyria Bulletin* 13 (1999–2001), pp. 164–65, where he postulated that the AST represented all the deceased kings listed in the Assyrian King List, 'The seasonal blossoming of a tree would have suited Assyrian ideology: Assyrian kingship alone in Mesopotamia stressed a reiterative regency embodied in the title SANGA ^{d}*Aššur* [where SANGA, *šangû* is defined as a 'priest, temple manager'] the premiere titulary of Aššurnasirpal II in the Standard Inscription, and the same title that Winter has tied so closely with the image of the king and tree in [the throneroom of his palace]. Early Assyrian kings proclaimed this traditional articulation of kingship by proxy in pious inscriptions reading "Aššur/ ^{d}*Aššur* is king, R[oyal] N[ame] is the vicar of Aššur"; and in coronation rituals in which a priest intones: "Aššur is king, Aššur is king." The [AST] would thus have represented not simply individual Assyrian kings, but all the iterations of a successive vice-regency for the god Aššur—each king an efflorescence of Aššur's rule over Assyria. The [AST] image incorporates this regenerative aspect not by dismissing naturalism for a schematized theological representation (as Parpola [e.g., 1993] would have it), but by dehistoricizing succession and the institution of kingship via supranaturalism, setting it altogether outside of time.' Here (on p. 165, n. 86), Richardson acknowledged his debt to Winter's idea that the AST represented the full temporal growth cycle of a date palm.

[330] Winter, 1999, p. 67, n. 28.

Winter believed that the Nimrud jewelry pieces portray two versions of a date palm partly because she reconstructed them as two earrings, presumably belonging to the same pair, although she does not say so. A year after Winter published her interpretation of these pieces, Muzahem Hussein and Amer Suleiman published a catalogue of the objects found in the queens' tombs at Nimrud, which included the two pieces referred to by Winter.[332] We see from their publication that there are in fact three pieces that the excavators found in the same tomb and that the pieces fit togther via hinges (see our fig. **58**): the pendant with the AST had been hinged on our right by the date palm pendant and on our left by the blank pendant. Based on this reconstruction, some experts believe the pendants must have originally belonged to a diadem or possibly a necklace.[333]

These pendants came from 'Tomb II' at Nimrud, which is believed to have the remains of two queens of Neo-Assyrian kings: Yaba, queen of Tiglath-Pileser III (744–727 BC), and Atalia, queen of Sargon II (721–705 BC).[334] In addition to the pendants, Tomb II also yielded a diadem composed of gold 'ribbon' and inlaid with 'tiger-eye' agate (fig. **59**). A comparison between the date palm and AST pendants and the diadem reveals some similarities that support a reconstruction of the pendants as once part of a diadem. Compare the gold tassels ending in pomegranates on both figs. **58** and **59**, as well as the side attachments on fig. **59** that could well explain the function of the holes on the date palm pendant seen in fig. **58**. Some ivories found in the southeast palace at Nimrud, dated to the reign of Sargon II, could also be used to support a diadem reconstruction for the pendants. In particular, fig. **60** shows a female wearing a diadem similar in construction to that seen in fig. **59**, that is, a pendant-shaped 'frontlet' with tassels ending in pomegranates and side attachments connecting it to a band encircling her head. (Another ivory found in the same palace shows a female wearing a tasselled frontlet, which represents a simplified version of the more elaborate diadem seen in fig. **59**.)[335] The date palm, AST, and blank pendants could be reasonably reconstructed according to these versions.

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[331] Oates, 2001, cover illustration. Others have used this image as a means to demonstrate that the AST represents a symbol of a date palm, among them M. Roaf, 'The Decor of the Throne Room of Ashurnasirpal II,' public lecture, Nimrud Conference, 11–13 March 2002, organized by the British Museum and British School of Archaeology in Iraq.

[332] See M. Hussein and A. Suleiman, *Nimrud, A City of Golden Treasures*, Baghdad, 2000, p. 237, cat. no. 42, acc. nos. IM 105813, 105814, 105815 (field no. ND 32), 'Three similar rectangular ornaments. Each is framed with a long stone made of dark blue stone. One of them is missing. The second stone is decorated with the sacred tree of life inlaid with multicoloured stones. The third stone is decorated with the shape of a date-palm with six palm leaves from which there hang two bunches of dates.' Collon suggests that instead of stone inlay, the material may be Egyptian Blue and glass (pers. comm.).

[333] Donny George Youkana does not believe that these two pieces are earrings. He thinks they must be pendants because of their large size, i.e., approximately three inches long; and because holes for attachment appear on the side but not at the top, as might be expected for earrings (pers. comm.). Based on Hussein's and Suleiman's catalogue information, Collon concurs with Youkana's opinion and suggests that the holes on the outer edge would have attached to gold strap-work or a band made of textile (pers. comm.). Hussein's and Suleiman's catalogue does not record the sizes of the pendants but does record their weights as 33.4 g, 30.35 g and 27.5 g (for the one lacking inlay). Note that earrings found in the queens' tombs and recorded in their catalogue are nothing like these pendants; further, compare cat. no. 43, acc. nos. IM 105828–32, also a set of hinged pendants with gold tassels, with IM 105813–15, as further support for a diadem or necklace reconstruction for our fig. **58**.

[334] Oates, 2001, p. 83. Though found in the same tomb, these pendants were not found next to each other (pers. comm. Youkana).

The AST and date palm are literally linked together in fig. **58** with another now-missing image. Are we to imagine that all three images denoted the same thing (e.g., a date palm) though represented in different styles? Or could we imagine that the date palm, AST and other missing image represent separate entities linked in other ways? James Fergusson's observations of the Black Stone (fig. **3**) led him to conclude that the appearance of ASTs and a date palm on the Black Stone demonstrated that they were conceived of as separate entities, as discrete emblems, each representative of an actual object.[336] Fergusson's approach releases us from a constructed interdependence between the date palm and AST, an interdependence that has been maintained by claims of similarity and the fertilization theory. There may well be a link between the date palm and AST, but it may well not be the one historically argued for.[337]

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[335] This ivory horse headpiece of a female wearing a tasselled frontlet (ANE 118104), from Sargon II's Southeast Palace is now in the British Museum: see R. D. Barnett, *A Catalogue of the Nimrud Ivories with Other Examples of Ancient Near Eastern Ivories in the British Museum*, 2nd ed. rev. and enlarged, London, 1957, pl. 63, S 146. For additional comparative material from the Nimrud ivories, see M. Mallowan, *Nimrud and Its Remains*, vol. 1, London, 1966, p. 212. figs. 148–52; and equally K. R. Maxwell-Hyslop, *Western Asiatic Jewellery c. 3000–612 B.C.*, London, 1971, figs. 232–36.

[336] Fergusson, 1851, pp. 299–300.

[337] For some ideas about a link between the AST and living trees, see my 'Conclusion' below. There are other instances of a date palm and AST image appearing together in the same context, besides that of the Black Stone and the Nimrud pendants, e.g., on an Achaemenid-dated cylinder seal now in the Walters Art Museum (acc. no. WAG C23): see C. H. Gordon, 'Western Asiatic Seals in the Walters Art Gallery,' *Iraq* 6 (1939), pl. XIII, 106; on a lekythos vase from Kertch, now in Leningrad and signed by Xenophantos 'the Athenian' (c. 400–350 BC): see R. D. Barnett, 'The Burgon Lebes and the Iranian Winged Horned Lion,' in M. K.-Buccellati, P. Matthiae and M. van Loon, eds., *Insight through Images, Studies in Honor of Edith Porada, Bibliotheca Mesopotamica* 21, Malibu, 1986, ill. 5; and on the 'Investiture scene' wall painting of Zimri-Lim's palace at Mari (c. 1775 B.C.): see M.-T. Barrelet, 'Une peinture de la cour 106 du palais de Mari,' in A. Parrot, ed., *Studia mariana*, Leiden, 1950, fig. 12d. Perhaps something would come of a study of these (and other) occurrences of the date palm and AST appearing together.

12 Trees of life, fortune and abundance

Layard, as its excavator, first described the AST seen in fig. 2 as the 'tree of life.'

> From the constant introduction of the tree ornamented with . . . circular flowers with five or more petals, or resembling the Greek honeysuckle, into groups representing the performance of religious ceremonies, there cannot be a doubt that they [ASTs] were symbolical and were invested with a sacred character. The sacred tree, or tree of life, so universally recognised in Eastern systems of theology, is called to mind, and we are naturally led to refer the traditions connected with it to a common origin.[338]

A century later fig. 2 was still referred to as the 'tree of life.' This description does not follow from indisputable evidence that shows the AST is in any way related to the Eden tree, but rather it follows from a set of beliefs expressed early on in the AST debate. We saw in chapter 1 that some scholars believed that the AST represented the 'tree of life,' which they identified as an actual tree, such as the *kiškānû*, translated by some as 'palm.' And we saw in chapters 4 and 5 that other scholars believed the AST represented the 'tree of life' as a date palm because of an assumed relationship between genies and cherubim based on Ezekiel 1.4–21 and 10.8–22, and 1 Kings 6.29–35. Midway through the twentieth century scholars no longer felt it necessary to explain why they used the term 'tree of life' when referring to the AST. This may be because they thought it had been convincingly shown that the AST represents one of the Eden trees. However, a more likely explanation is that scholars had by that time gotten into the habit of using the term 'tree of life' to mean a generic sacred tree. It is not normally possible to know what late twentieth-century scholars mean(t) by the term 'tree of life,' as they rarely qualified their usage of it.[339]

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[338] Layard, vol. 2, 1849, p. 472.

[339] German-language publications have regularly referred to the AST as a 'Lebensbaum.' This seems to reflect a generic use of the term actually meaning 'sacred tree,' but one cannot discount other associations. See, e.g., H. Schmökel, 'Ziegen am Lebensbaum,' *Archiv für Orientforschung* 18 (1957–58), pp. 374–77, Abb. 4, 8; F. Hancar, 'Das Urartäische Lebensbaummotiv: eine neue Bedeutungstradition?' *Iranica Antiqua* 6 (1966), pp. 100–104, Taf. XXII, fig. 1, 3; Moortgat, 1967, pp. 136, 138, 145, 151; H. Genge, 'Zum "Lebensbaum" in den Keilschriftkulturen,' *Acta Orientalia* 33 (1971), pp. 321–34; and S. Herbordt, 'Neuassyrische Kunstperiode, IV, Glyptik,' *Reallexikon der Assyriologie* 9 (1999), p. 268, Abb. 2. For sources written in English that use the term in relation to the AST and that also seem to reflect a generic use of the term meaning 'sacred tree,' see, e.g., J. E. Reade,

It is, however, possible to discern the motivations behind early twentieth-century usage of the term 'tree of life' when applied to the AST. William Ward, writing in 1910, consciously referred to the AST as 'the sacred tree' and as 'the tree of life' in his attempt to work through the relation between the AST and paradise tree. He also described the AST as a 'tree of fortune,' to indicate its separate but linked status to the 'tree of life.' Ward saw an overlap in meaning among the three terms, which he expended some effort to explain.

In his introductory paragraph to his AST chapter entitled 'The Tree of Life,' Ward set forth the relation between the AST and the 'tree of life.'

> The designation of the Sacred Tree has become so established that it may be used in place of the Tree of Life, which would more definitely express the purpose of the presence of human figures or divine figures or animals before a conventionalized tree.[340]

Here Ward acknowledged use of the term 'sacred tree' in lieu of 'tree of life' to refer to the AST. We note, however, that he preferred the term 'tree of life,' as he thought that term more accurately described the meaning of AST compositions. Ward used both terms interchangeably ('sacred tree,' 'tree of life') to refer to the AST throughout his chapter.

Ward explained why one must consider both the 'tree of life' and the 'tree of knowledge of good and evil' when analyzing the AST as a 'tree of fortune.'

> It is impossible not to raise the question, what was the relation between the sacred tree, or, if one may call it so, tree of fortune, on the one side, and the tree of life, or that of the knowledge of good and evil, in the Genesis story of the temptation. In the Genesis story there are thus two trees, as in the Avestan myth, and they both bore fruit which Adam and Eve might eat. There were also cherubim, as well as a serpent. It would seem as if there must be some mythological relation between the tree and cherubim of the Assyrian art and the trees and cherubim of the Eden story. Certainly the interpretation here gives us the sacred tree as a tree of gifts of fortune much more in

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'Assyrian Architectural Decoration, Techniques and Subject-Matter,' *Baghdader Mitteilungen* 10 (1979), p. 43; E. O. Negahban, *Metal Vessels from Marlik, Prähistorische Bronzefunde*, Abteilung 2, 3, München, 1983, pp. 13, 92; A. Harrak, 'Preliminary Remarks on the Grave Recently Discovered in the North-West Palace at Nimrud,' *The Canadian Society for Mesopotamian Studies Bulletin* 16 (1988), p. 27; Eiland, 1993, pp. 14–15; and Kourou, 2001, pp. 31–33. Also to be considered in this context is the current descriptive label for our fig. 1 in the British Museum, which refers to the AST as 'a sacred tree, possibly symbolizing life. . . .' For sources written in Japanese that use the term in relation to the AST, see, e.g., K. Watanabe, 'The "Tree of Life" in Ancient Mesopotamia—The Present State of Study and Its Problems,' *Studies in Symbolism and Iconology* 3, Tokyo, 1989, pp. 84–98.

[340] Ward, 1910, p. 219.

> keeping with the trees of Genesis than is the explanation given by [Edward] Tylor, which sees here simply the process of fertilization.[341]

Here Ward introduced the term 'tree of fortune,' which he used interchangeably with 'sacred tree' to describe the AST. In visualizing the AST as a 'tree of fortune,' Ward had in mind a Middle Assyrian cylinder that he thought showed a genie 'plucking fruit from the tree' (fig. **26**). Ward defined a 'tree of fortune' as a tree that fruited 'gifts of fortune' then given to humans by the genies. This was how he distinguished the AST as a 'tree of fortune' from the Eden trees.

> In both cases [in the Genesis text and in Neo-Assyrian art] the fruit of the tree is for the man. He eats of the fruit of the tree of knowledge and he is driven from the tree of life because its fruit would give large life; and after the man had partaken of the wrong tree the cherubim stood guard over the tree of life that he may not eat it. Of course, there is a contrast, in that the Assyrian design represents the winged cherubim, as they are called in Ezekiel and I. Kings, as providing the fruit, plucking it off for the worshipper, while it is the purpose of the Genesis writer to show how man lost his immortality. . . . We may then see that the Genesis story and the Assyrian sacred tree throw light on each other.[342]

Ward thought that the AST as a 'tree of fortune' must be related to the Eden trees because the AST was also a fruit tree and because the AST was presided over by winged genies, just as the 'tree of life' was presided over by cherubim. We may remember that Ward had identified the AST as a date palm based on the claim of formal similarity, having likened the genies' cones to date bunches. He also thought that the AST represented a conventionalized or stylized version of an actual date palm.

> The Tree of Life, also called the Sacred Tree, is one of the most frequent and characteristic objects depicted in Assyrian art. It has been much misunderstood, but it represents the bestowment of long life and other blessings, and thus corresponds very much to Fortuna. The tree was originally a palm. . . . It was developed into the most conventional and elaborate artistic forms.[343]

In addition to the claim of similarity, Ward systematically drew upon the claim of social significance to bolster his identification of the AST as a date palm.

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[341] Ibid., pp. 232–33.

[342] Ibid., p. 233.

[343] Ward, 1909, p. 77.

> Here the [AST] is evidently the date-palm, *par excellence* the fruit-tree of the Euphrates valley.[344]
>
> [The AST] was originally and normally a palm, because the palm is the most beneficent of all trees.[345]
>
> . . . what tree [was] so fruitful as the date-palm?[346]
>
> In these cases it seems generally clear that it is the palm that was the original of the sacred trees [ASTs], as, indeed, was to be expected.[347]

The claim of social significance has been used at various times over the course of the twentieth century, and into the twenty-first century, as another means for establishing the identification of the AST as a date palm.[348]

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[344] Ward, 1910, pp. 220–21.

[345] Ibid., p. 229.

[346] Ibid., p. 232.

[347] Ibid., p. 223.

[348] Consider, e.g., Ebeling, who decided the AST represents a date palm based on a text concerning a contest between a date palm and tamarisk that appeared (partly due to its fragmentary state) to show the date palm to advantage. See Ebeling, 1924, p. 370, 'Als heilige Bäume gelten in Babylonien vor allen Dingen die Dattelpalme (*gišimmaru)* und die Tamariske (*bīnu*). Die akkadische Fabeldichtung erzählt von einem Streit der beiden Bäume um den Vorrang. Die Dattelpalme trägt dabei den Sieg davon. Sie ist es auch, deren Gestalt dem "heiligen Baume" der bildlichen Darstellungen zugrunde liegt, wenn auch in oft recht starker Stilisierung.' See also Ebeling, 1932, p. 435; and Ebeling, 'Die babylonische Fabel und ihre Bedeutung für die Literaturgeschichte,' *Mitteilungen der Altorientalischen Gesellschaft* Bd. 2, Heft 3 (1927), pp. 6–11, 'KAR III, 145.' Consider also Eiland, 1993, p. 12, who decided that the AST was a date palm, based in large part on the importance of the date palm to Mesopotamia, 'In Mesopotamia . . . much of the iconography seems to have assumed . . . some characteristics of the date palm, a tree whose fertility was of particular importance to the local economy.' And p. 14, 'Consideration of both the iconography of Mesopotamia and the historical importance of the date palm reveals the significance of these figures [i.e., genies holding buckets and 'cones']. The Near East has long depended upon the date palm to supply a variety of needs. The date is both highly nutritious and easily transported, and it was a major component of the early Mesopotamian diet. It provides virtually the only usable wood on the Mesopotamian plain, while the dried fronds can be used for wind breaks or thatch.' On p. 15 Eiland recorded praise through the ages in various cultures for the date palm and ended his analysis of the meaning of the AST attended to by genies with the following conclusion on p. 17, 'While some aspects of this ['cone' and bucket] ritual may not be precise enough to suggest date palm pollination in particular, it seems clear that many elements are strongly indicative of the influence of date culture. Perhaps the ritual here portrayed was not even understood by the carver as bearing any meaning beyond a spiritual one. This is plausible, as the northern region of Assyria is too cool to successfully ripen dates on a large scale.' Most recently, see Lambert, 2002, p. 321, where he began his article with the claim of social significance before moving to the claim of similarity (pp. 323–24) and then the fertilization theory (p. 325), all to support an identification of the AST as a date palm.

Although Ward had acknowledged the close relations between the AST and the Eden trees, he saw the AST as something separate and different. Ward had noted a discrepancy between the Eden trees and the AST, that is, that humans were denied fruit from the 'tree of life' but were rewarded with fruit from the AST. Because of this difference Ward decided that the AST would be more accurately understood as a 'tree of fortune,' 'mythologically related' to the Eden trees yet individuated from them.

In his analysis of fig. **26**, Ward defined the genie's purpose as picking fruit.

> From the summit there arise five clusters of the fruit; and a winged human figure with the head of an eagle, such as is familiar in the Assyrian art, with evident effort is breaking off the bunch of dates, if we may so call it; he has rested his foot on the lower part of the tree, so as to secure a purchase for his pull, and with one hand he holds the fruit, while with the other he bends its stem so as to break it off. We are left here under no reasonable doubt that the purpose is to gather the fruit, not to fertilize it. We may then conclude that the object of the pail or basket (the occasional weaving would allow either) is to hold the fruit gathered from the tree.[349]

This seal has been dated by Porada to the Middle Assyrian period, and the tree or pole depicted looks quite different from the AST. Also, although Ward interpreted the genie's action as plucking fruit, no fruit is discernible on this 'tree.' Rather, it appears that a genie is plucking a palm frond. Nevertheless, Ward placed it in the same category as the 'AST' seen on Aššurnasirpal's walls. He based his 'tree of fortune' interpretation primarily upon this seal and used it to explain all ASTs regardless of their composition, that is, regardless of what activity the genies performed around AST and regardless of what the AST looked like.

Ward's interpretation of the AST as a 'tree of fortune' depended heavily upon parallels with later material that did not necessarily have any relation to the AST. For example, Ward reported that

> I once showed a very large and unusual piece of old Persian embroidery to Rabbi Baba, the most learned of the Nestorians of Urumia who has prepared a careful and complete dictionary of the Nestorian Syriac dialect. It represented an enormous tree full of branches, and the branches were full of extraordinary conventional fruit. I asked him the meaning of it, and he replied that it typified the fortunes of man. It was then a tree of fortune. Rabbi Baba told me that on a Mosul rug of mine, having a design much like the Assyrian sacred tree, with its seven pairs of branches and their fruit of different colors, the tree represented the fortunes of life, the lower fruit light-green, meaning

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[349] Ward, 1910, pp. 230–31. See also Ward, 1909, p. 77, for the same description of this image. See also Porada, vol. 1, 1948, pp. 70–71, and pl. 86, fig. 609E.

> the ignorance of childhood, red the stirring of blood, black trouble, etc. Such I take it is this sacred tree of the Assyrians and their neighbors.[350]

We do not know the date of either rug that Rabbi Baba described as featuring a 'tree of fortune,' nor do we know what the trees on these rugs looked like. We do know that no remains of rugs exist from the Neo-Assyrian period and that the rugs that Ward referred to must be well removed in time from the first millennium BC. Furthermore, it would be incautious for us to assume that the 'trees' represented on these rugs resemble what we take to be ASTs, since we know that Ward had an all-inclusive definition of ASTs based on a broad chronological and stylistic range of various tree representations.

Ward had understood the AST as different from the Eden trees by focussing on the activity of the genies, which he considered inviting, versus that of the cherubim, which he had considered prohibitive. To further the idea of beneficent genies, Ward argued that the genies shared several features in common with the Roman goddess Fortuna.

> The Latin Fortuna . . . was a goddess, and she carried the fortunes already plucked. Her horn of plenty, full of fruits or flowers, represents the pail, or basket, in the hand of Assyrian Fortunus. Under her various names the Latin Fortuna was much honored, with such titles as Fors Fortuna, Fortuna Panthea, Fortuna Felix, Isis Fortuna, but regularly with her gathered fruit, usually in a horn, but sometimes in a modius carried on her head. She might also carry ears of wheat in her hand, or a poppy-head. It is observed that the Assyrian king, or god, in the bas-reliefs also may carry a three-parted or five-parted branch with fruit or flowers; and that there are many cases in which the fruit on the sacred tree might as well be a poppy-head as an acorn. Fortuna is often represented with wings, like our Assyrian Fortunas, if we may so call the attendant spirit.[351]

By likening the genies to images of Fortuna, Ward emphasized their specific activity of plucking fruit, their deified status as indicated by their wings, and their beneficent nature of storing the fruit in order to give it away.

Furthermore, Ward managed to explain every component of the AST composition through his 'tree of fortune' interpretation. The AST-as-date-palm represented a 'tree of fortune' that fruited 'gifts of fortune.' The genies represented deified beings who plucked the gifts from the 'tree.' The 'cone' represented date bunches, that is, 'gifts of fortune,' stored in the genies' buckets before being given away.

Ward's 'tree of fortune' idea did not enter the mainstream of AST interpretations as such. But we do find his idea reiterated over the years, expressed in somewhat different terms. As might be expected, Perrot and

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[350] Ward, 1910, p. 231.

[351] Ibid., p. 232.

Danthine quoted Ward's 'tree of fortune' idea in their summaries of AST interpretations.[352] Later, we find remnants of Ward's ideas, specifically his explanation of the genies' activity in connection with the AST—for instance, '[Ivory figures of winged eagle-headed genies] holding buckets appear to pluck the fruit of the "sacred tree."'[353]

The most explicit iteration of Ward's ideas has appeared fairly recently in W. G. Lambert's interpretation of the AST. For all intents and purposes, Lambert appears to have arrived at the same conclusions as Ward, but using different means. After asserting that the AST is a palm that the genies pollinate, Lambert then surmised that

> . . . the fertility of palms was understood in a figurative sense of prosperity and success. Such a concept is well known in late second- and first-millennium Babylonia and Assyria. Figurines buried at entrances are inscribed: 'Uproot disease, enter, Mešrû,' a term translated 'wealth, prosperity, riches' by the *Chicago Assyrian Dictionary*, also used as a poetic name of the palm tree. Thus it is argued that this stylized tree [AST] did not, in Ashurnasirpal's palace, symbolize any particular deity, but was similar to the Roman's *bona Fortuna*.[354]

Lambert has maintained this view but relinquished the debt to Fortuna.[355] No other scholar that I am aware of has connected the AST so conspicuously to Fortuna as Lambert did in 1985. However, others have found Lambert's reference to the Akkadian *mašrû/mešrû*, translated as 'prosperity, wealth,' helpful for coining the term 'tree of abundance.' Although the terms have changed from describing the AST as a 'tree of fortune' to now describing it as a 'tree of abundance,' the meaning has remained constant.

> It seems reasonable to conclude that the tree scene carved on the walls of Ashurnasirpal's palace did indeed represent the pollination of date palms. But what message was the scene meant to convey? Part of the answer, I think, lies in the characteristics of date palms themselves. Dates were an important food in Mesopotamia, rich in calories and easily perserved. Date

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[352] Perrot, 1937, pp. 103–4; Danthine, 1937, pp. 143–44.

[353] See R. D. Barnett, *Ancient Ivories in the Middle East and Adjacent Countries, Qedem* 14, *Monographs of the Institute of Archaeology, The Hebrew University of Jerusalem*, Jerusalem, 1982, p. 41. Here Barnett referred to Urartian items from Altıntepe, acknowledging their 'close connections with Assyrian art . . . in terms of the theme of the griffin-demon with the cone and bucket [in connection with the AST]. . . .(cp. Pl. 39a, b. "Neo-Assyrian ivories of griffin-demons holding cone and bucket, from Balawat, 850 B.C., British Museum, ANE 117925").'

[354] Lambert, 1985, p. 438.

[355] See now Lambert, 2002, p. 326, 'This palm in art [AST] is not the symbol of a god or the whole pantheon of gods, but is a symbol of the benefits which gods and kings were expected to supply.' See here too for Lambert's citations of texts (ur-ra$_5$=*ḫubullu* and the 'Babylonian Theodicy') that link the Akkadian words *mašrû/mešrû* ('wealth' or 'prosperity') with the palm tree.

> palms bear fruit abundantly, in heavy clusters, with a single tree often yielding more than one hundred pounds of fruit per year over a productive lifetime of one hundred years or more. It is no wonder that Akkadian synonyms for date palm included 'tree of abundance' (*iṣ mašrê*) and 'tree of riches' (*iṣ rašê*), appropriate names for a tree which is a natural emblem of agricultural abundance.[356]

Here Porter used the term 'tree of abundance' to describe the AST as a date palm, after drawing upon the fertilization theory and the claim of social significance for support. Like Ward's term 'tree of fortune,' the term 'tree of abundance' is used to refer quite specifically to the AST as a date palm and all the metaphors associated with date palms (e.g., fertility, plenty).

'Tree of abundance' may someday supplant 'tree of life' and 'sacred tree' to describe the AST, as it has already supplanted 'tree of fortune.'[357] The argument that the term 'tree of abundance' is validated by texts is only possible if one already believes the AST represents a date palm; and even then there are contextual problems with linking the date palm so specifically to 'prosperity' or 'riches.'[358] As long as we are convinced of the fertilization theory and/or the claims, we will continue to scour the texts for a phrase that confirms our own ideas that the AST represents a date palm.

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[356] Porter, 1993, p. 134. See also Porter, 2000, p. 216, '. . . the central trunk with palmette [referring to the AST on Aššurnasirpal's walls] is clearly a stylized date palm, called the "tree of riches" and the "tree of abundance."' And see Winter, 2000, p. 65, n. 14, 'The composite Assyrian tree [called] more properly, the "tree of abundance". . . .'

[357] E.g., see Winter, 2003, p. 253, 'The tree [AST] is surely based upon the date palm; literally neither "Tree of Life" nor "Sacred Tree" from any known Assyrian text, although often referred to as such in the modern literature, it more likely has overtones of a generic "Tree of Abundance," which quality the tree embodies through its highly stylized composite construction.'

[358] As Winter, 2003, p. 261, n. 6, has pointed out, '. . . despite occasional references to the date palm, the connotation of the word *mašrû* seems to be more that of wealth in property and goods. . . .'

13 *Apkallu* and *kurību*

In chapter 5 we discussed the fact that Layard was the first to have thought that the cherubim of Ezekiel's description (1.4–21) had been inspired by the combined features of the winged genies, lions and bulls appearing in and around Neo-Assyrian palaces; and that later on in the nineteenth century, Lenormant had identified the human-headed winged bulls protecting Neo-Assyrian palace and temple entrances as '*kurību*' and had argued for a connection with the Hebrew *kerûb* on etymological grounds.

We also saw in that chapter how Tylor had accepted Layard's explanation that all three types—winged bulls, winged genies and lions—constituted the source for the Biblical cherubim. For the purposes of demonstrating that the AST represents a date palm, however, Tylor focussed entirely on the genies as the source for the cherubim. He cited Ezekiel 1.8 and 10.8–9, which described the cherubim as having 'the likeness of the hands of a man under their wings,' to demonstrate that the genies who stand on either side of the AST must have served as the model for the cherubim. Then he cited 1 Kings 6.29–35, which described carved figures of cherubim and palm trees as evidence for the identification of Neo-Assyrian genies as cherubim and the AST as a date palm. Tylor had constructed a relationship between the genies and AST that meant each could only be understood in terms of the other. This forced interdependence advanced his own interpretation that the AST represents a date palm being fertilized.[359]

Tylor's matching of Biblical text to Neo-Assyrian imagery entered the twentieth century via Ward, who reiterated Tylor's identifications.

> That it [the AST] was a palm ought to be clear from the mention of the tree in the Bible. In Ezekiel . . . we read in the description of a temple: 'It was made with cherubim and palm-trees, and a palm-tree was between cherub and cherub on the walls'; and [elsewhere in Ezekiel] we are told . . . , 'On the doors of the temple cherubim and palm-trees, like as were made on the

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[359] Some scholars have argued against an interdependence between the genies and AST, but continue to identify the AST as a stylized tree: see, e.g., Russell, 1998, p. 692, '. . . it now appears that the relationship between the [genies] and the [stylized palm] tree is not one of mutual dependence, but rather functional similarity. The tree [AST] and *apkallu* [genie] are actually performing the same function, namely warding off evil.' Previously see F. Wiggermann, *Mesopotamian Protective Spirits, The Ritual Texts, Cuneiform Monographs* 1, Groningen, 1992, p. 67, 'The sacred tree benefits from the activities of the genii, the genii do not need the tree. It is not necessary to understand the meaning of the tree in order to understand the meaning of the figures with the bucket and cone.' Prior to Wiggermann, see Stearns, 1967, pp. 70–71, for this particular observation.

> walls.' In 1 Kings 6.29, we are told of Solomon's temple: 'He carved all the walls of the house round about with carved figures of cherubim and palm-trees and open flowers.' These are plainly the sacred tree between the winged figures on the Assyrian monuments, these winged figures corresponding to Biblical cherubim. To be sure it later ceased to be a naturalistic date-palm and became a mere ornamental and conventional tree. . . .[360]

Since Ward had identified the AST as a representation of a date palm himself, it follows that he would have accepted Tylor's interpretation of the 1 Kings passage.[361] Ward also accepted Tylor's understanding of the Ezekiel passages concerning the genies as 'cherubim.' Ward thought Neo-Assyrian genies were the visual precursor to the Biblical guardian angels.

> For this attendant figure, under whatever winged shape, human or composite, is clearly not a chief god, but subordinate and beneficent. It is the earliest form we have of the 'guardian angel' of later Jewish and Christian religions. It is not feasible to attempt to differentiate these figures standing by the tree; they are all of a lower grade than the gods, and protective, like the winged bulls and lions which the Assyrian kings put at the gates of their palaces.[362]

We have here a remnant of the *kurību*=*kerûb* discussion begun in the nineteenth century with Lenormant, in which Lenormant had identified the winged bulls and lions as '*kurību*' or guardian figures. A few years later scholars decided the winged genies belonged to this guardian-figure category of '*kurību*' and focussed their discussion on the genies to the exclusion of any of the other guardian-figure types. This is the association we still make today, that *kurību*, as *kerûb*, refers to winged genies and not necessarily to other protective figures such as winged bulls or lions.

Tylor's biblically based analogy, that the genies represent cherubim and that the AST represents a date palm, continued to find acceptance in the early twentieth century.[363] It is obvious that Albright had fully assimilated the Biblical text with the Assyrian imagery, and with Tylor's fertilization theory, when he claimed that

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[360] Ward, 1910, p. 229.

[361] Late twentieth-century date palm theorists continue to cite the 1 Kings passage as support for a date palm interpretation of the AST. See, e.g., Russell, 1998, p. 690 (describing the genies and AST wall relief composition at Nimrud), 'This repertoire of winged figures [genies], stylized palms [ASTs] and rosettes, so well-established in imperial Assyrian architectural decoration of the ninth and eighth centuries, is even reflected in the "figures of cherubim, palm-trees and open flowers" reportedly carved on the walls of Solomon's temple (1 Kings 6.29). The date of composition of this passage is uncertain, and therefore it is not known whether this description was influenced by knowledge of Assyrian buildings or whether it represents a separate occurrence of these types in Israel.'

[362] Ward, 1910, p. 232.

[363] See, e.g., von Luschan, 1912, pp. 28–29, where he summarized Tylor's conclusions that the genies represent cherubim and the AST represents a date palm based on Ezekiel 1.4–21 and 1 Kings 6.29–35.

> . . . the *kerûbîm* who guard the tree of life, are unquestionably the winged genies of fecundity who fertilize the female date palm in Assyrian sculptures. . . .[364]

Here also Albright noted the etymological relationship between *kurību* and *kerûb*.

> The word [*kerûbîm*] is Assyrian; *kirûbu*, 'guardian genius,' is derived from *karâbu*, 'to bless,' a stem not found outside of Assyrian.[365]

Apparently then, *kerûb* is a loanword from Akkadian.[366] The inference Albright drew from this was that the image of a *kerûb* must also have been taken from Mesopotamia, so that a *kerûb* must have looked like a *kurību*. But what does a *kurību* look like? We assume that it looks like a *kerûb*, which we also assume has wings and human features.[367] But this reasoning is circular.

In 1923, the archaeologist and philologist Stephen Langdon made some headway with these issues in his translation of the *Enuma Eliš*, or 'Creation Epic.' In this narrative, the word '*karūbu*' appears.[368] Langdon commented on its meaning:

> *karūbu* has the same meaning as *karību*, 'one who prays,' an image of a mythical monster placed at the gates of temples and palaces . . . see [mention of *karību* for] the images at the gates of a temple in Susa. The word *kurību* has

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[364] Albright, 1920, p. 282.

[365] Ibid., p. 282, n. 2. Previously see Lenormant, trans., 1883, pp. 119–27, where he identified *kirûbu* with 'genius.'

[366] Scholars have interpreted the meaning of 'cherubim' based on their understanding of *karābu*, *kurību*. See, e.g., E. A. Speiser, *Genesis, Introduction, Translation, and Notes, The Anchor Bible* 1, 2nd ed., Garden City, NY, 1964, p. 24, commenting on the word 'cherubim' in Genesis 3.24, 'Cf. Akkadian *karību* and *kurību* which designate figures of interceding deities.' Also see D. J. Wiseman, *1 and 2 Kings, An Introduction and Commentary, The Tyndale Old Testament Commentaries*, Leicester, 1993, p. 110, who in commenting on 1 Kings 6.23–28 noted that cherubim 'may refer to winged sphinxes of Syro-Phoenician style, or to protective figures with specific non-human features (Akkadian *kurību*) guarding the entrances to palace and temple doorways, with their feet ready to drive off evil, or to figures making a gesture of adoration (Assyrian *karību*).' See also Russell, 1998, p. 690, n. 103, for more bibliography on *kurību* and cherub.

[367] Our assumptions concerning the features of cherubim have changed over time, in particular whether or not they had wings. See, e.g., F. Saxl, 'Continuity and Variation in the Meaning of Images,' in *F. Saxl Lectures*, vol. 1, London, 1957, pp. 8–9 (lecture delivered 1947).

[368] '*Karūbu*,' '*karību*' and '*kurību*' are all forms of '*karābu*.' See the entry for '*karābu*' in M. Civil et al., eds., *The Assyrian Dictionary of the Oriental Institute of the University of Chicago*, vol. 8, *K*, Chicago, 1971, p. 193.

> the same sense . . . [meaning figures] at the two sides of a gate. The derivation of all these forms from *karābu* is certain. See the Sumerian [word meaning] . . . a statue which prays (for the king and people), i.e., [in Akkadian] *karību*. . . . The meaning 'interceding statue,' more especially statue of the mythical fish-ram of Ea, then came to mean 'intercessor,' protector. . . . This 'intercessor,' a figure of a mythical monster, is clearly identical with the Hebrew *kerûb*, cherub, and possibly to be identified with the fish-ram. . . .[369]

Langdon described the relation between *kurību* and *kerûb* as 'identical,' with both representing a mythical monster who acted as an 'intercessor' and 'protector.' However, when Langdon imagined a *kurību*, he did not think of a winged angel-type figure from the scriptures; rather he thought of the well-known composite animal-type known in Mesopotamian texts and art as the 'goat-fish.'

Since Langdon's commentary, we have not made much progress in understanding what features are particular to *kurību*s. One text has been interpreted as describing a figure with 'the head of a *kurību* (but human hands and feet),' while another text has been translated as describing '*laḫmu*-monsters and *kurību*s made of reddish gold facing each other.'[370] While scholars have identified in art other guardian-type figures known from cuneiform texts, they have yet to identify a *kurību*.

However, we have made progress in identifying the winged bird-headed genies that sometimes attend the AST. Scholars have been identifying them for a while now as *apkallu*, or the Seven Sages.[371] According to Babylonian tradition, seven *apkallu* (or sages) lived before the Flood. Neo-Assyrian instructions for rituals prescribe sets of protective figurines to be made of different forms, including winged figures with bird's faces, holding a bucket and a 'purifier.' A plaque found at Aššur underneath an incantation priest's house, dating to the seventh century BC, shows a winged bird-headed genielike figure holding a bucket and 'cone.' The close formal similarities with the winged bird-headed genies depicted on the large-scale wall reliefs of Aššurnasirpal's palace at Nimrud strongly suggest both plaque and wall reliefs represent the same type of protective figure, that is, *apkallu*.[372]

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[369] S. Langdon, *The Babylonian Epic of Creation, Restored from the recently recovered Tablets of Assur, Transcription, translation and commentary*, Oxford, 1923, p. 190, n. 3.

[370] Civil et al., vol. 8, 1971, p. 559.

[371] See A. R. Green, 'Neo-Assyrian Apotropaic Figures with Special Reference to the Human "Heroes" and Human-Animal Hybrids, Iconography, Chronology, Identification and Significance,' Ph.D. diss., Department of Archaeology, University of Manchester, 1983, 'XI. Griffin-demon,' pp. 401–44, for a survey of the literature since 1926 and commentary. Texts inform us as to the particular features of two types of *apkallu*, i.e., 'the fish-garbed' type and the winged 'griffin-demon' type.

[372] See Green, 1983, p. 402, who argued that the identification of the bird-headed genie as *apkallu* 'may now be taken as certain. . . .' Also see Mallowan, 1983, pp. 33–35; Green, vol. 3, 1995, p. 1848, fig. 5.17, 'griffin-demon=*apkallu* "sage" (in bird-guise).' Most recently see Russell, 1998, p. 692ff. for further confirmation of an *apkallu* identification for the

Scholars seem fairly certain that the winged bird-headed genies appearing in, for instance, fig. 2 represent *apkallu*s. If it is no longer accurate to identify them as *kurību*s or as *kerûb*s, then the discussion concerning etymological and visual links between *kurību* and *kerûb* and the winged genies has reached an end, at least as concerns an identification of the AST.[373]

Once we separate the winged genies from their former association with Biblical cherubim, we can go further and separate the genies' activity from the AST. By analyzing in which compositions the genies occur, what instruments they carry (e.g., 'cone,' 'brush,' 'bucket'), and what types of figures they attend to, scholars have already gained a greater understanding of the genies' activity.[374] Such analyses can also show that the AST, far from being exceptional, represents just another figure attended to in the same way by the genies.

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winged bird-headed genies. For examples of statuette-sized bird-headed genies (in the round), see, e.g., E. Klengel-Brandt, 'Ein neuassyrischer Vogelgenius,' in U. Finkbeiner, R. Dittmann and H. Hauptmann, eds., *Beiträge zur Kulturgeschichte Vorderasiens, Festschrift für Rainer Michael Boehmer*, Mainz, 1995, pp. 295–97, Taf. 31c (from a private collection, ht. 4 cm; the electron [electrum] genie is holding a bucket, but his other hand is missing); and Barnett, 1982, p. 41 and pl. 39 (from Balawat, reconstructed ht. 19 cm; the ivory parts of the genie show it holding a bucket in one hand and a cone in the other).

[373] *Apkallu*, *kurību* and *kerûb* all refer to protective mythical creatures. To this extent understanding one type might help us understand another. Using them to understand the AST as a stylized date palm, however, no longer seems helpful.

[374] Textual and comparative visual materials suggest that scenes with genies, buckets and cones denote acts of purification or protection (Stearns first noted this in 1961, pp. 70–71; now see Magen, 1986, pp. 74–81). See Reiner, *Šurpu, A Collection of Sumerian and Akkadian Incantations, Archiv für Orientforschung* 11 (1958), pp. 41, 60a, who discussed texts that identify the bucket as a '*banduddû*,' which in certain rituals was filled with water and used to sprinkle onto people; she also discussed another instrument called a '*mullilu*,' which translates as 'purification instrument.' The cone appears to be the most common object held in the hands of the bird-headed genies and fish-cloaked genies. Frans Wiggerman has said that 'if it is agreed upon that a word denoting the cone must appear among the terms denoting objects held by . . . genies in [certain types of apotropaic] rituals, this word can only be *mullilu*.' For this see Wiggermann, 1992, p. 67.

PART III

The Cult Object Theory since 1900

14 Kinds of thing

Stephen Langdon and Louis Speleers helped to develop the view that the AST represents a divine symbol, much as the wedge and spade have been acknowledged as symbols that represent deities in ancient Near Eastern imagery. In his article on gestures of worship in Mesopotamian art, Langdon included two Neo-Assyrian seals that both depict a worshipper before an 'arch-and-net'-type AST (figs. **61–62**).[375] On these seals, a winged disk floats just above the AST, and the worshipper at left, who stands before the two symbols, raises up his arms, palms open, towards the disk. Langdon described the worshipper's gesture as directed towards this winged disk.

> [On the Neo-Assyrian seal seen in fig. **61**] both hands are extended palms inward in the act of receiving blessings from the deity. . . [and on] the [other Neo-Assyrian] . . . signet type of seal [fig. **62**] the open-hand position again prevails. . . .[376]

Langdon did not discuss the role of the AST in these scenes, nor did he comment on its meaning. However, he juxtaposed these seals with other Neo-Assyrian and Neo-Babylonian examples that depict worshippers before human-form and aniconic representations of gods (e.g., spade and wedge symbols), and he noted the frequency with which symbolic versions of the gods appeared.

> The human who is figured standing before a god, or in Assyria more frequently before a divine symbol . . .[377]

Langdon saw that worshippers used the same gesture of worship before the AST and disk that they used before other symbolic and human versions of the gods. Langdon's findings supported Fergusson's and Rawlinson's idea that the AST seen in figs. **61–62** represents a divine symbol. Speleers took the interpretation that the AST represents a symbol of worship one step further.

Speleers analyzed another Neo-Assyrian cylinder (fig. **37**) that features a bearded human gesturing before an AST, which is itself placed next to a number of symbols.[378] Speleers described the seal as depicting a scene of actual cult activity that was probably performed before divine symbols housed in temples.

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[375] Collon has described this AST-type as 'the arch-and-net tree.' See Collon, 2001, p. 83, '[The arch-and-net tree] is a Sargonid development of the Ashurnasirpal-type tree. . . . It consists of a central trunk within an arch, the two being linked by a network of zigzag or cross-hatched lines.'

[376] S. Langdon, 'Gesture in Sumerian and Babylonian Prayer, A Study in Babylonian and Assyrian Archaeology,' *Journal of the Royal Asiatic Society* (October 1919), pp. 539–40 (referring to figs. 16, 18 in his text = our figs. **61–62**).

[377] Ibid., p. 531.

> . . . le lapicide a gravé un tableau représentant une scène de culte, comme il a dû s'en passer journellement dans les sanctuaires antiques: *l'adoration de plusieurs emblèmes divins par un fidèle.*[379]

Speleers described the gesture of the bearded man before the AST as 'worshipping.' He referred to the AST, together with the other figures near it, as symbols worshipped by the human.

> Debout de profil à gauche, l'adorateur lève la main droite à la hauteur de la figure et avance l'autre à la hauteur de la taille, toutes deux dirigées vers les emblèmes. C'est le geste bien connu qui accompagne l'hommage, l'adoration ou le discours. Le premier symbole est *l'arbre de vie ou l' 'arbre sacré'* surmonté du disque ailé.[380]

Because the gesture of worship occurs before the AST, Speleers observed that the AST must represent a symbol. By interpreting the AST as a divine symbol that appeared in a temple, Speleers echoed the views of Fergusson and Rawlinson, who had regarded the AST as a constructed cult object. However, although Speleers regarded the AST on this cylinder as a divine symbol, and one that was worshipped, he did not regard it as a pole or necessarily as artificial. Instead, he thought the AST on fig. **37** shows a stylized palm, clearly connected to ASTs such as those seen in Aššurnasirpal II's wall reliefs—which he also regarded as stylized palms.[381] From this it appears that Speleers thought the AST represented an actual tree that had been worshipped in a temple.

We find more indirect support for the pole or cult object theory from Sidney Smith, who developed his views of the AST from 1921 to 1928. During that time Smith maintained that the AST represents an actual tree trunk decorated with metal bands and fillets of fresh greenery. He also suggested that the AST represents an *ashêrah* (or 'May-pole') and a *djed* pillar. Smith's interpretations of the AST were based on cuneiform texts from the

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[378] See Speleers, 1929, pp. 62–65, fig. 4. The symbols shown are a winged female figure, crescent standard, rhomb, another standard topped by three rows of three balls, star and fish. Speleers republished this seal (O.788) in his catalogue of ancient Near Eastern seals in the Brussels collection: see L. Speleers, *Catalogue des intailles et empreintes orientales des Musées Royaux du Cinquantenaire, Attaché aux Musées Royaux du Cinquantenaire de Bruxelles*, t. 2, Brussels, 1943, pp. 116–17 (no. 788).

[379] Speleers, 1929, p. 62 (emphasis his).

[380] Ibid. (emphasis his). It appears to me that the left-facing worshipper lifts his left hand up to the (winged) figure and projects his right hand forward at waist level.

[381] See ibid., pp. 62–63.

Neo-Assyrian and Neo-Babylonian periods, and therefore his ideas constituted one of the first attempts to match images of the AST with texts written around the same time that the images were created.

Smith first fully articulated his basic view of the AST in figs. **1–2** in 1922:

> The tree [AST] is a most peculiar object, being apparently bound at certain parts of the trunk by metal bands, and then hung with intertwining boughs, the whole being surmounted by an arbour of twigs. Tylor saw in the whole scene, in which certain figures are depicted, a ceremony derived from the fertilization of the date palm, but [Léon] Heuzey [in Pottier, 1917] has given good reasons for doubting this. The habit of putting ornamental bands round cedar trees in temple-precincts is attested by inscriptions of New Babylonian rulers. This fact alone inclines me to believe that the tree . . . is a cedar tree. I am the less willing to think the tree is a date palm because that tree does not grow in the latitude of Nimrud.[382]

Smith did not describe the AST as 'conventionalized' or 'stylized'; he simply referred to it as a cedar tree with metal attachments and also decorated with boughs and twigs. Smith's cedar tree identification effectively dealt with the problem of the AST representing a date palm in a region where dates could not be harvested. Consequently, Smith supported a purification explanation for the 'cone' and bucket, which involved genies dipping cedar cones into resin that was then used for anointing.[383] Smith's cedar tree and purification interpretation of the AST demonstrates that scholars after Bonavia continued to argue for a tree identification for the AST without finding it necessary to rely on the fertilization theory.

It seemed to Smith that this 'habit of putting ornamental bands round . . . trees in temple precincts,' which he had found references to in texts, correlated with what he saw in figs. **1–2**. In addition to the texts he cited above (i.e., Neo-Babylonian building inscriptions of Nebuchadrezzar II), he also thought that a Neo-Assyrian letter relaying the rebuilding of the shrines of Marduk and Nabû described what we see in these figures. Smith discussed this letter in a small article on the Akkadian word *tallu*, but what chiefly interested Smith was the bit just before the occurrence of *tallu*, which he understood to be a description of the preparations for the New Year festival that 'concerned the gardens in Nabu's temple having been tended to, the fillets having been removed . . . for fresh ones to be (placed on a tree in the garden?), the priest cut off the "yoke" (from a tree?) and the goldsmith put on (the tree?) a golden dish made by Sargon.'[384] We can see how free Smith's translation is here, and we will see how later scholars took up that point.

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[382] Smith, 1922, pp. 43–44.

[383] Ibid., p. 44, n. 3, 'The cones in the hands of the divine figures may well be cedar cones, the resin from which was used for anointing.'

[384] The text is in R. F. Harper, *Assyrian and Babylonian Letters Belonging to the Kouyunjik Collection of the British Museum*, vol. 9, Chicago and London, 1914, no. 951 (K 189), lines 11ff. For Smith's translation provided here, see Smith, 'Miscellanea, (x) *tallu*,' *Revue*

Initially Smith had claimed that this 'habit of putting ornamental bands round cedar trees' had been attested in Neo-Babylonian inscriptions that describe the reconstruction of the Marduk and Nabû temples.[385] While this interpretation would also be scrutinized later on, Smith mostly enjoyed support for his ideas from his followers, who,with him, believed his translation explained the imagery of figs. **1–2**, in which 'Nature revival' rituals were performed during the New Year's festival in Babylon and Aššur, where metal attachments and greenery were placed around bare tree trunks.[386]

Smith also thought that the AST was culturally linked to the *ashêrah*, in that both were the focus of 'sympathetic magical rituals . . . intended to promote [the] revival of Nature in the New Year. . . .'[387] And he emphasized certain formal similarities shared by the AST and *djed* pillar, in addition to suggesting a religious connection between the two:

> Its [the *djed* pillar's] form is peculiar, since at the top there are four or more spreading lines, which seem to be intended to represent branches. Below these branches there are generally represented bands, which are in intention very possibly the counterpart of the metal bands on the Assyrian sacred tree.[388]

Smith's idea, that the AST represents a 'bedecked' living tree/bare trunk around which metal bands and fresh fillets of greenery were placed according to rites performed during the New Year, placed him closer to those who thought the AST represents a real tree that symbolizes fertility than to those who thought it represents a decorated polelike object. However, his emphasis on the metal band decoration vividly recalls Riegl's ideas—who we know endorsed the constructed object theory.

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d'assyriologie et d'archéologie orientale 21 (1921), p. 84; see also a reference to his interpretation of this text in idem, 'Notes on the "Assyrian Tree,"' *Bulletin of the School of Oriental Studies* 4 (1926–28), p. 72 and n. 1; and idem, *Early History of Assyria to 1000 BC. A History of Babylonia and Assyria III*, London, 1928, p. 123.

[385] The texts are in S. Langdon, *Die neubabylonischen Köningsinschriften,* Leipzig, 1912, pp. 148–49 (no. 17, col. III, lines 27–29, for the Marduk temple) and 158–59 (no. 19, col. VI, lines 11–13, for the Nabû temple). For Smith's translation provided here, see Smith, 1922, p. 44 and n. 2, and idem, 1928, p. 123 and n. 10.

[386] See Smith, 1921, p. 84, n. 2; idem, 1922, p. 43; idem, 1926–28, p. 72 and n. 2; and idem, 1928, pp. 122–23. For Smith's 'followers,' see chapter 15 below.

[387] Smith, 1928, p. 123, 'There is . . . good reason for claiming that this ritual [performed around the AST] came with the early Assyrians from the west, because a very similar set of practices obtained in Syria and Palestine in connection with the bare pole called *ashêrah.*'

[388] Ibid. See also p. 125, '. . . the djed column sacred to Osiris closely resembles the ornamented tree sacred to Ashur; and the myth of Osiris so far as the incidents of the death and resurrection are concerned, is parallel to the myth of Marduk . . . who is equated in the late period with Ashur.'

Smith's cursory remarks on the connection between the AST and *ashêrah* were based partly upon the research of the philologist Heinrich Zimmern. Zimmern asserted that an etymological relationship existed between Hebrew *ashêrah* and Akkadian *aširtu*.[389] Based on additional comparisons with Hittite usage of the word, Zimmern claimed that *aširtu* (like *ashêrah*) denoted a wooden cultic post, a cult room or cella of a temple (also the cult room of a private home), as well as the name of a goddess (understood to be the personification of the cult object itself).[390] Birger Pering applied Zimmern's interpretations concerning this etymological connection and shared multiple meanings between *ashêrah* and *aširtu* in order to develop his own interpretation of the AST.

> Das Wort *ʾašērāh,* im Alten Testament der Name eines Pfahles am Kultplatze, hat ein akkadisches Gegenstück in *aširtu* oder *eširtu.* In Assyrien wurde damit aber nicht ein Pfahl, sondern der Kultraum bezeichnet. Wahrscheinlich verhält es sich so, daß die Kanaanäer den Namen des Kultpfahles von Osten übernommen haben, dass in Assyrien selbst aber der Name des Kultpfahles auf den Kultraum übertragen wurde. . . . Was uns in diesem Zusammenhang interessiert, ist, daß *ʾašērāh* einen Kultpfahl bezeichnete und *aširtu* ursprünglich die gleiche Bedeutung gehabt haben dürfte. Alles spricht dafür, dass der assyrische Lebensbaum [AST] dieser Kultpfahl war und somit den Verbindungspunkt zwischen Himmel und Erde darstellte.[391]

Whereas Smith had focussed mainly on a cult pole definition for the *ashêrah/aširtu*, Pering maintained the *ashêrah* (and hence the AST) represents both a cult pole and a cult place. In Pering's view, it was wrong to identify the AST as a living tree or to connect it to fertility rituals as Smith had done.[392]

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[389] See ibid., p. 123, n. 10. For Zimmern's analysis, see H. Zimmern, 'Neues zu Aschera,' *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 6 (1927), pp. xliii–xliv. While Smith saw a connection among *ashêrah*, *aširtu* and the AST, Zimmern did not discuss these relations, nor the AST.

[390] Zimmern, 1927, p. xliv, 'Damit erwiese sich dann aber auch schon aus äußeren formalen Gründen *ʾašērā* als nicht einheimisch kanaanäisch, sondern als ein, freilich recht altes, Lehnwort aus dem Babylonischen. Die Bedeutungsentwicklung denkt sich der Vortragende dann etwa so: 1. babyl. *aširtu* "gerade aufgerichteter (hölzerner kultischer) Pfahl" bezw. "(hölzernes kultisches) Gestell," daraus früh entlehnt kanaan.-hebr. *ʾašērā* in der gleichen Bedeutung, und ebenso das hethitische $^{\text{gis}}$ZAG.GAR-RA (*aširtu*, *ištanānaš*); 2. babyl. *aširtu* "Kultraum des Tempels," "Cella," auch "innerster Kultraum" eines Privathauses, erst abgeleitet von dem in dem Kultraum befindlichen Kultgerät des Namens *aširtu* (so auch *ʾ-š-r-t* in der phönik. Inschrift aus Maʿṣūb); 3. babyl. *Aširtu*, hebr. *ʾAšērā* als Name einer weiblichen Gottheit, eigentlich das personifizierte Kultgerät.'

[391] Pering, 1932–33, p. 291. See p. 291, n. 91, where Pering cited Zimmern, 1927; and p. 290, where Pering discussed the *ashêrah* as a cult place.

[392] See Pering, 1932–33, pp. 288–89, where he dismissed the idea that the AST represents an actual date palm, on the grounds that date palms cannot fruit as far north as Assyria and also on the grounds that the AST does not resemble a living tree (this is quoted in chapter 8 above). See p. 291, n. 92, where Pering cited Smith, 1928, and disagreed with Smith's

In emphasizing the linked meanings between cult object and cult place that he found inherent in the terms *ashêrah/aširtu*, Pering tried to argue that the AST represents, in concrete form, the place linking heaven and earth. Pering further identified this 'Mittelpunkt' as the navel of the earth, what the ancient Greeks had referred to as the omphalos, or sacred stone representing the center of the earth.[393]

Pering regarded the AST appearing in fig. **61** as resembling more an omphalos than a tree.[394] When we compare painted and sculpted examples of the omphalos seen in figs. **63–64** with the cylinders seen in figs. **61–62**, we

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idea that the *ashêrah/aširtu*/AST represented a fertility cult object around which 'Nature revival' rituals took place.

[393] For this definition, see J. E. Harrison, *Themis, A Study of the Social Origins of Greek Religion*, 2nd rev. ed., Cambridge, 1927, pp. 396–99, 'By the time of Aeschylus, the omphalos was regarded as simply a holy Stone which, by pious consent, was held to be the center of the earth; it was a fetish thing supremely sacred, to which the suppliant clings . . . in the innermost shrine. . . . Omphalos, like umbilicus, came to mean navel, but originally it only meant any sort of boss or thing that bulged. . . . The omphalos . . . was . . . made of white stone . . . covered with a net of fillets. . . .' Pering's larger project involved understanding the role and meaning of the winged disk; therefore his interpretation of the AST—which he understood as linked to the meaning of the winged disk—fits within this larger framework. Basically, Pering understood the Akkadian phrase *'markas šamê u irṣitim'* to mean the cosmic umbilical cord (literally, 'band') connecting heaven and earth. He applied this phrase to the meaning of the winged disk, interpreting the 'ribbons' hanging down from the winged disk as the 'umbilical cord' and the disk itself as representing the heavens. According to Pering, the AST then represents the place of contact between humans and the divine forces. See Pering, 1932–33, pp. 291–92, 'Die assyrischen Künstler bildeten den Nabel der Erde in der konkreten Gestalt des Lebensbaumes ab. Jetzt glaube ich die Meinung vertreten zu können, daß auch *markasu* in der Bedeutung "kosmischer Nabelstrang" wenigstens von den Künstlern konkret gefaßt wurde. Dieser Nabelstrang wurde in Form eines Bandes dargestellt, das von Himmel, d. h. der geflügelten Scheibe, über den Lebensbaum herabhing. Daß die Bänder wirklich die Verbindung zwischen den Menschen und den Göttern symbolisieren sollten, geht daraus hervor, daß die Könige als Adoranten ihre linke Hand um die Bandenden schliessen.'

Pering situated his suggestion of an omphalos identification for the AST in earlier detailed studies on the form and meaning of the omphalos. For the omphalos in an ancient Near Eastern context, see W. H. Roscher, *Omphalos, Eine philologisch-archäologisch-volkskundliche abhandlung über die vorstellungen der Griechen und anderer völker vom 'Nabel der erde,' Abhandlungen der Philologisch-historischen Klasse der Königlich-Sächsischen Gesellschaft der Wissenschaften* Bd. 29, Leipzig, 1913, pp. 23–33; idem, *Neue Omphalosstudien, Ein archäologischer Beitrag zur vergleichenden Religionswissenschaft, Abhandlungen der Philologisch-historischen Klasse der Königlich-Sächsischen Gesellschaft der Wissenschaften* Bd. 31, Leipzig, 1915, passim; idem, *Der Omphalosgedanke bei verschiedenen Völkern, besonders den semitischen, Ein Beitrag zur vergleichenden Religionswissenschaft, Volkskunde und Archäologie, Berichte über die Verhandlungen der Sächsischen Gesellschaft der Wissenschaften zu Leipzig Philologisch-historische Klasse* Bd. 70, Leipzig, 1918, pp. 8–12.

[394] Pering, 1932–33, p. 291, 'In den meisten Fällen hat er ['der assyrische Lebensbaum'] ein Aussehen, das an ein griechisches Omphalosbild erinnert, ja, er gleicht mehr einem solchen als einem Baum.' See also p. 291, n. 93, where Pering noted a total of six such cylinders illustrated in Ward, 1910 (figs. 683–84, 686–89) that seemed to him to more closely resemble an omphalos (note that Ward, 1910, fig. 686 = our fig. **61**).

note that the most obvious similarity shared between the omphalos and this particular AST-type is the ovoid shape decorated with netting. Although the philologist Arent Wensinck had already suggested a close formal relationship between the omphalos and trees appearing in ancient Near Eastern art, Pering was the first to see the AST as the omphalos itself, as an actual object.[395]

Walter Andrae used Pering's idea, that the AST represents the omphalos, in order to formulate his own, that the AST represents 'humankind.' Andrae understood the AST in terms of its surrounding elements. Not only did Andrae consider the relationship between the winged disk and AST, but he also analyzed the relationship between the AST and genie/animal/monarch figures standing on either side of it. Like Pering, Andrae's analysis of these relationships led him to understand the AST as a representation of the connecting element between heaven and earth that ultimately symbolized humankind. (Unlike Pering, however, Andrae described the activity around the AST as fertilizing—even while drawing an analogy between the AST and the *ashêra*.) Andrae reworked Pering's omphalos interpretation by seeing in mankind the embodiment of the location of the meeting of heaven and earth, represented in the form of the polelike/treelike AST.

> Zwischen dem hingelagert Waagerechten, der Erde, und dem schwebend-Beflügelten, dem Himmel (als Gestirn und Gottheit), reckt sich der Aufrechte, der Mensch, wie der senkrechte Stamm des Lebensbaumes empor (Aschera, Massebe, Stele, Menhir, also wie Pfähle senkrecht aufgerichtete Steine, scheinen Ähnliches auszusprechen).... Die assyrischen Bilder zeigen es eingehüllt von Götterwesen oder Tierwesen (Löwen, Stieren, Sphingen) oder von höheren Menschen (Königen, Priestern). Sie strahlen ihre Kräfte zu ihm hin, indem sie die Hände über es breiten, die befruchtende Blüte über es stäuben, sich vor ihm neigen, die Verbindung zum beflügelten Himmlischen mit den Bändern herstellen. Sie stehen paarweise, wie die beiden Säulen einer Ädikula, zwischen Erde und Himmel, die Boden und Dach der Ädikula sind, den Lebensbaum, das Menschwesen ein- und umfangend und stabilisierend. Es ist in der Tat

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[395] Pering referred to the work of A. J. Wensinck, who had thought that the omphalos symbol was represented together with 'trees' on select ancient Near Eastern seals. See Wensinck, *Tree and Bird as Cosmological Symbols in Western Asia, Verhandelingen der Koninklijke Akademie van Wetenschappen te Amsterdam,* Amsterdam, 1921, pp. 10, 14 (referring to figs. 8, 15). Wensinck defined the omphalos as the symbol of the earth and the 'conventionalized tree' as the sign of life. He described an AST-type appearing on a Neo-Assyrian cylinder (floral arch without netting: see idem, p. 14, fig. 15 = Ward, 1910, p. 238, fig. 715) as having 'the form of an omphalos and the conventionalized twigs or fruits of a tree, a new illustration of the identity—to a certain extent—of tree and omphalos, in so far as the former represents the Eastern part of the earth, the latter the earth as a whole.' Although Wensinck understood the omphalos and 'tree' as very closely related, and in this example as merged, he did not identify the 'arch-and-net tree' on Neo-Assyrian seals (e.g., our figs. **61–62**) as a representation of an omphalos but rather as a 'conventionalized tree.'

> erreicht, daß Mensch mit Gott in dieser Art in innigste Verbindung kommt: ein Bild der Totalität des Kultischen und damit ein Abglanz des Mysteriums.[396]

Also like Pering, Andrae believed that the AST represents an object, inherently artificial. He based this view on his own formal analysis of the AST, which he saw as one stage removed from the Ionic column, the origins of which Andrae attempted to trace all the way back to depictions of reed plants in Mesopotamian art. Between the reed plant images and the Ionic column, Andrae saw a series of different symbols, each having developed out of the last. So, for example, he believed that images of reed plants were eventually transformed into the Mesopotamian 'ring-post' symbol, which was in turn transformed into the Mesopotamian 'ring-staff' symbol, then the Mesopotamian 'rod with balls' symbol, and finally the AST symbol, before becoming the Ionic column.[397] In tracing the form of the AST back to reed plants, Andrae argued that although the AST ultimately found its source in nature, its final form was far from mirroring an actual tree.

> Die Bindungen und die Struktur des Stammes, die Wickelung und Entwickelung der Voluten und ihrer Blütenenden, die Verschränkung und Verbindung dieser palmettförmigen Blütenenden untereinander und mit dem Stamm durch Wellenbänder, machen aus dem assyrischen Lebensbaum ein kunstvolles Geflecht. . . . Am Stamm durch die Streifenkonturen und das 'Sparrenmuster,' die weder dem Wesen des Bündels, noch dem des Palmstamms gerecht werden, die Bindungen in Gestalt ein- bis dreifacher Wülste, die dem Wesen des Palmstamms und der Blüten widersprechen, die Kelchblätter durch den Besatz mit perlenartigen Bucklen; manchmal wachsen diese Kelchblätter wider die Natur über und unter der Bindung gegenständig heraus. Die Voluten rollen sich nach oben auf, sie schwingen daher S-förmig. Auch in die krönende Blüte hinein erstreckt sich die Abkehr vom Natürlichen![398]

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[396] Andrae, 1933, p. 50. Also see the diagram on p. 51 (reproduced here):

	***Himmel** (Flügelscheibe, Gott in Flügel-Gloriole)*	
'Engel'		***'Engel'***
König	**Mensch** (Lebensbaum)	***König***
Dämon		***Dämon***
Tier		***Tier***
	***Erde** (Berge, Standlinie)*	

[397] See ibid., pp. 53–58, and p. 55, Abb. 48. The 'ring-post' symbol is otherwise known as a 'gate-post with streamers,' i.e., a reed bundle, the pictogram for the goddess Inana. The 'ring-staff'' symbol is also known as a 'post with pairs of rings.' The 'rod with balls' symbol has also been referred to as the 'emblem of stability.' According to Andrae, a particular AST form emerged from this evolution of symbols—that being a double-voluted AST-type such as seen in glazed brick relief on the throneroom walls of Nebuchadnezzar's palace (see our fig. 70)—although he did fit the AST seen in relief on Aššurnasirpal II's walls into his evolution of forms that reflected his 'Regel der Vergliederung' (for this, see p. 12 and Abb. 10).

[398] Ibid., p. 12. However, a decade before Andrae had argued that the AST represents a stylized date palm with close ties to nature. For this interpretation, see in particular Andrae, 1925, p. 5 (and our discussion in chapter 7 above).

Andrae's search for the origins of the Ionic column had already been undertaken by others who had argued that the Ionic capital was inspired by representations of the flora, symbols and architectural components appearing in Mesopotamian art. The archaeologist Otto Puchstein had initiated this kind of investigation into Near Eastern art in the late nineteenth century, and his analyses continued into the early twentieth century along with those of Felix von Luschan and Erwin and Reinhold Wurz.[399] When we look at the work of Puchstein, von Luschan and the Wurz brothers, we see that although their questions were mainly concerned with the origins of the Ionic capital/column, they analyzed the very objects Riegl had cited in order to demonstrate that the AST represents a piece of furniture. Their publications thus provided background and illustrations for the Nimrud metal 'binding' elements that Riegl saw represented on the AST but had not illustrated himself or discussed in any detail.[400] Their formal analyses of these metal bindings and their choice of comparative material is useful for thinking about Riegl's 'furniture' description of the AST, as well as for considering Sidney Smith's assertion that representations of metal bands adorn the 'trunk' of the AST.

Puchstein had traced the origins of the Ionic column and capital to Mesopotamian columns and capitals, which, he argued, had developed out of certain floral forms; for example, he traced the Mesopotamian column to the trunk of a date palm and the Mesopotamian capital to the head of a lily. He supported his argument with evidence that came in the form of Neo-Assyrian reliefs, such as depictions of architectural components on a wall relief of Aššurnasirpal II (fig. **50**) and on the bronze bands of Shalmaneser III (figs. **65–66**), which he thought illustrated similarities with the Ionic form, as well as with flora.[401] Puchstein also introduced a three-dimensional metal object into this discussion, a metal 'binding' element that Layard had found at Nimrud (fig. **67**). Layard had thought that fig. **67** had once been a furniture piece because of another type of 'binding' element he had also found at Nimrud, which appeared to him to have been used in the cross-bar construction of a throne (see fig. **68**; and cp. fig. **69a**). When Riegl described the

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[399] See, e.g., O. Puchstein, *Das ionische Capitell,* Berlin, 1887, and idem, 'Die ionische Säule als klassisches Bauglied orientalischer Herkunft,' *Mitteilungen der Deutschen Orient-Gesellschaft* 4 (1907), pp. 5–55. Compare R. F. von Lichtenberg, *Die ionische Säule als klassisches Bauglied rein hellenischem Geiste entwachsen,* Leipzig and New York, 1907, who based his conclusions on much the same monuments as those selected by Puchstein. See also von Luschan, 1912, pp. 5–43; and E. and R. Wurz, 1925.

[400] See Riegl, 1893 (1992), p. 94, n. 62, where he mentioned in a note the 'binding' elements that he thought compared well with similar-looking elements seen on the AST. Riegl mentioned two types of 'binding' elements as illustrated in Layard, *The Monuments of Nineveh from Drawings made on the Spot, Illustrated in One hundred plates,* London, 1849, pls. 5 (for the horizontal double-volute binding) = our fig. **68**, and 96 (for the vertical double-crescent binding) = our fig. **67**.

[401] See Puchstein, 1907, pp. 30–32, and Abb. 34–37 for our figs. **50, 65–67**, reproduced from Perrot and Chipiez, t. 2, 1884, figs. 67–68, 388 (which = our figs. **50, 66–67**).

AST as constructed like a piece of furniture, he had both types of Nimrud 'binding' elements in mind, as well as the throne depicted in relief.

In his discussion of the construction of Mesopotamian columns, Puchstein compared the vertically placed double-crescent 'binding' element (fig. **67**) with attachments appearing on poles or struts of a canopied structure represented on one of the bronze bands (fig. **66**; compare also **65**). In placing figs. **50**, **65–67** on the same page, and in comparing the 'binding' element to the attachments of poles or struts depicted in relief, Puchstein unified material that Perrot and Chipiez had previously separated into two different categories.[402] In fact, Riegl's argument is strengthened by a direct comparison between this double-crescent 'binding' element and the attachments appearing on poles or struts depicted in relief.

Von Luschan was interested in tracing the origins of the volutes of the Ionic capital. In his search he turned to Mesopotamian furniture elements, specifically a reconstructed Neo-Assyrian throne with horizontally placed metal double-volute 'binding' elements appearing on the cross-bar (fig. **69b**).[403] To my knowledge, this illustration featuring these double-volute 'bindings' is the only extant published example.[404] The 'binding' elements seen in fig. **68**, excavated by Layard at Nimrud, are the same ones that Layard had reconstructed as belonging to the cross-bar of a throne based on a relief of Aššurnasirpal II enthroned (cp. fig. **69a**). Von Luschan also illustrated the vertically placed metal double-crescent 'binding' element that Puchstein had noted earlier (fig. **67**).[405] In illustrating these, von Luschan managed to discuss both types of 'binding' elements that Layard had found at Nimrud and that Riegl had referred to in his comparison of the AST to a piece of furniture.

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[402] Perrot and Chipiez had placed fig. **67** in a discussion on furniture and fig. **66** in a discussion on architectural construction, with 500 pages between them. However, Perrot and Chipiez, t. 2, 1884, p. 202, had proposed that the columns depicted in figs. **50** and **66** had metal attachments, i.e., metal capitals and metal sheathing for the column itself, 'Les chapiteaux devaient être en métal, ainsi que les figures de chèvres sauvages qui surmontent les deux fûts entre lesquels s'encadre la porte. . . . Les filets verticaux et les chevrons qui en décorent la surface sont-ils gravés sur une enveloppe de métal ou peints à même le bois? C'est ce qu'il est difficile de dire.' See also p. 222ff., where Perrot and Chipiez included the AST in their discussion of the development of the Mesopotamian column.

[403] Layard discovered the pieces of a throne at Nimrud (reconstructed in fig. **69b**), which are now housed in the British Museum. See Layard, *Discoveries in the ruins of Nineveh and Babylon; with travels in Armenia, Kurdistan, and the Desert, Being the result of a second expedition undertaken for the British Museum,* London, 1853, pp. 198–200, for his discussion of the remains. It is believed that the reconstruction seen here is Victorian (pers. comm. C. B. F. Walker); and it has since been demonstrated that this reconstruction is inaccurate, and it has therefore been disassembled (see H. Kyrieleis, *Throne und Klinen, Studien zur Formgeschichte altorientalischer und griechischer Sitz- und Liegemöbel vorhellenistischer Zeit, Jahrbuch des Deutschen Archäologischen Instituts* 24, Berlin, 1969, pp. 32–33). J. Curtis has briefly discussed the double-volute type bronze 'binding' found at Nimrud (our fig. **68**) in J. Curtis, 'Assyria as a Bronzeworking Centre in the Late Assyrian Period,' in J. Curtis, ed., *Bronzeworking Centres of Western Asia c. 1000–539 B.C.*, London, 1988, p. 85; J. Curtis and J. Reade, eds., *Art and Empire, Treasures from Assyria in the British Museum,* London, 1995, p. 124; and, J. Curtis, 'Assyrian Furniture, The Archaeological Evidence,' in G. Herrmann, ed., *Furniture of Western Asia, Ancient and Traditional, Papers of the conference held at the Institute of Archaeology; University College London June 28–30, 1993*, Mainz, 1996, pp. 169, 171–73. Also in the same volume, see U. Seidl, 'Urartian Furniture,' p. 184, fig. 3.1 and pl. 57, who discussed the bronze remains of double-volute type bronze 'bindings' found at Altıntepe, which have been reconstructed as part of the cross-bar on an Urartian 'stool.'

[404] That is, von Luschan, 1912, Abb. 5.

However, von Luschan did not discuss the AST in light of these metal attachments or compare the AST to the poles/struts depicted in figs. **50** and **65–66**. Rather, he thought the AST contributed to the development of the Ionic capital because of its inherently floral form. Thus, he argued that the AST represents a stylized date palm: the vertical 'pole' element represents a stylized form of the trunk, the palmette crown represents a stylized version of palm leaves and the volutes (upon which the palmette crown sits) represent stylized fruiting bunches of dates, as do the binding elements depicted on the middle or bottom of the trunk.[406] The Wurz brothers analyzed the AST in a similar way, tracing the origins of what they referred to as three sets of 'horns' appearing on the 'trunk' of the AST.[407] Their comparison between these sets of 'horns' and the two types of 'binding' elements that appeared on representations of canopy struts and furniture suggested to them that these forms were to be traced to palm leaves.[408]

The Wurz brothers and von Luschan illustrated both types of 'binding' elements in their discussion of attachments depicted on poles, furniture and the AST. They compared the remains of actual attachments with those depicted in relief in order to demonstrate their formal similarity, that is, that all of these attachments were inspired by the date palm. Not once did the cult object theory emerge as a possible reading of AST imagery in the midst of their discussions about the metal 'binding' elements, though we know that Riegl specifically introduced these 'binding' elements in order to support the cult object theory.[409]

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[405] Ibid., Abb. 35.

[406] Ibid., pp. 22–29, 34–35.

[407] Previously, Bonavia, 1894, pp. 46–47, figs. 18–19, had referred to the 'binding' elements on the AST as 'ibex horns.' Prior to Bonavia, G. Rawlinson, vol. 2, 1864, p. 236, had described the AST as 'a short pillar springing from a single pair of rams' horns, and surmounted by a capital composed of two pairs of rams' horns separated by one, two, or three horizontal bands. . . .'

[408] See E. and R. Wurz, 1925, pp. 32–33, Abb. 83, 85–86; p. 25, Abb. 57 (for the reconstructed throne).

[409] See Riegl, 1893 (1992), p. 94, for his observations concerning the 'binding' elements and that the AST represents an object that had been 'fitted together from various components which include shafts connected by sheaths like those on Assyrian furniture.'

15 Construction work

For the next forty-odd years (1926–68), scholars neglected the Nimrud metal 'binding' elements in their discussions about the AST. Perhaps this neglect had something to do with the fact that both types of 'binding' elements found by Layard at Nimrud were illustrated intermittently for only a relatively short period of time in the mid- to late nineteenth and early twentieth centuries, and only in a limited number of sources.[410] However, in the 1930s, cult object theorists found another class of metal attachments, this time excavated from Sargon II's capital at Khorsabad, that they thought convincingly explained that the AST represents a constructed unit.

In the last chapter we learned that Sidney Smith had cited textual evidence to support the idea that in fig. **1** Aššurnasirpal is represented standing next to a tree trunk or pole decorated with metal bands. Soon thereafter, Henri Frankfort introduced archaeological material from Khorsabad to support Smith's interpretation.[411] Frankfort's evidence included decorated metal bands found around a wooden pole outside the Šamaš temple and the embossed metal casing enclosing wooden poles found outside the Sîn temple.[412] Victor Place and Gordon Loud, excavators of the Khorsabad poles, initially referred to these poles as 'trees,' but later Loud changed his interpretation to 'decorated standards,' after toying with the idea that they may have been 'artificial trees.'[413]

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[410] Layard first published drawings of both 'bindings' in Layard, vol. 1, 1849. Perrot and Chipiez reproduced Layard's drawings in Perrot and Chipiez, t. 2, 1884. Following this, a drawing of our fig. **67** and a photograph of our fig. **68** were illustrated in von Luschan, 1912, and E. and R. Wurz, 1925. After this point, these 'binding' elements were no longer illustrated, and, until now, no published photos existed of our figs. **67** and **68**.

[411] See initially Frankfort, 1939 (1965), p. 206; and then idem, *Kingship and the Gods, A Study of Ancient Near Eastern Religion as the Integration of Society and Nature,* Chicago, 1948, p. 409, n. 8; and idem, *The Art and Architecture of the Ancient Orient,* 1954, rep. ed., Harmondsworth, 1979, p. 137 and n. 12. Frankfort was present at Khorsabad when Gordon Loud first discovered the remains of poles and bands found next to the various temples.

[412] Metal fragments similar in design to the bands found outside the Šamaš temple were also found outside the Ningal temple and inside the Adad temple. For the bands, casing and poles dated to the reign of Sargon II, see G. Loud, *Khorsabad, Part I, Excavations in the Palace and at a City Gate,* University of Chicago Oriental Institute Publications, vol. 38, Chicago, 1936, pp. 80–128, esp. pp. 97 and 104; and Loud and Altman, 1938, pp. 43-45.

[413] In his excavation reports, Loud noted two cedar poles previously found by Place in the 1860s outside the Sîn temple. These poles were apparently encased in a bronze sheath embossed with an imbricated design. Sheets of gold leaf were found nearby and Place thought the gold leaf overlay the bronze. Place referred to these embossed poles as 'trees' and reconstructed them as palms. Loud, 1936, p. 98, interpreted these remains as 'decorated staffs' and as 'trees': 'There is no questioning the decorative value of these tall vertical shafts emerging from behind the tableaus and framing the temple portal. But in addition to this

Frankfort himself eventually described the poles as 'decorated masts.'[414]

These two interpretations of the decorated poles found outside the Khorsabad temples—that is, as 'artificial trees' or as 'decorated standards'—had a direct impact on the idea that the AST represents a constructed cult object. Both Frankfort and Loud believed that the metal bands found around poles at Khorsabad demonstrated that the AST must represent an actual object, something (a tree trunk, a pole) around which metal bands had once been placed. They believed this based upon Smith's interpretations of Neo-Assyrian and Neo-Babylonian texts discussed in the last chapter.

When Frankfort's and Loud's views first came to light, they affected a number of archaeologists, such as Helene Kantor, Edith Porada, Marie-Thérèse Barrelet, Max Mallowan and Barbara Parker, who, from 1945 to 1968, refined and developed the idea that the AST represents an artificial tree and/or decorated standard. In 1969, Helmut Kyrieleis published his monograph on ancient furniture in which he argued that AST images represent a three-dimensional object constructed of specific elements, such as the Nimrud metal 'bindings.' After this point, discussions ceased concerning the relation between the Nimrud and Khorsabad material and a cult object interpretation of the AST. The discussion was briefly revived by Samuel Paley in 1976, who, however, strongly discouraged further thought on the matter. He succeeded, for the most part. No further discussion of the Nimrud or Khorsabad attachments and their relation to the AST has taken place until now.

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Paley demonstrated that Smith's textual evidence was built on the insecure foundation of mistranslations: in particular, where Smith thought he

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there is a possibility that they played some part in the temple ritual. As decorated staffs rather than trees they may have been used to display flags and banners of religious significance . . . ; or as trees they may have played an important part in the religious services. [Loud then described Sidney Smith's ideas regarding metal bands and fillets placed around bare tree trunks in a garden as part of the New Year's festival in Assyria.] This [Smith's idea] most certainly suggests a connection between the "trees" [of Khorsabad] with their bronze bands and the ritual of the New Year.' Loud found his own pole, outside the Šamaš temple, decorated with a bronze band divided into two registers and embossed with figures of a king grasping two bulls by their horns, an attendant, a large bird in flight, a fig tree and a plow. Throughout his discussion of these remains in Loud, 1936, pp. 104–8, Loud referred to the pole/bands as a 'tree' and not as a staff. However, Loud and Altman, 1938, pp. 44–45, showed their preference for the staff interpretation, after briefly considering an artificial tree interpretation, as a general means of thinking about all the various decorated poles found in relation to the temples at Khorsabad (discussed below in chapter 16).

[414] See H. Frankfort, 'Oriental Institute Museum Notes, Two Acquisitions from the Simkhovitch Collection,' *Journal of Near Eastern Studies* 5 (1946), p. 155, '. . . copper bands which decorated the masts at the temple entrances on the Palace Hill at Khorsabad . . . show a combination of engraving and embossing. . . .' Frankfort's revised interpretation of the Khorsabad poles as 'decorated masts' is close to Loud's interpretation of them as 'decorated standards.'

had found Neo-Babylonian evidence for the 'habit of putting ornamental bands round cedar trees in temple precincts,' Paley argued that these texts were 'an account of the general reconstruction of the Marduk and Nabu temples in Babylon, which included the covering of wood (pillars, beams, door posts, door leaves or the like) with metal decoration.'[415] And where Smith thought that a Neo-Assyrian letter described the decoration of a tree trunk with fillets of greenery, metal bands and a gold dish, Paley argued that 'the letter referred to actually describes the rebuilding of a doorway made of wood, not the refurbishing of a cultic tree.'[416] Paley took this philological failure as sufficient reason to discard the metal band and pole theory.[417]

However, Paley mischaracterized Smith's basic view, and this mischaracterization has confused and blurred subsequent understanding of both Smith's and Riegl's contribution to the AST discussion. Paley characterized Smith's view as follows:

> For many years references have been made to the suggestion, which seems to have originated with [Sidney] Smith, that the [Assyrian sacred/stylized] trees represent an article of furniture used in the temple cult.[418]

As far as I am aware, Smith did not hold this view: Smith believed the AST represented on palace walls depicted either a living cedar tree or a bare tree trunk in a garden around which metal bands were placed and then fillets attached.[419] This point of attribution is important as scholars continue to be led by Paley's mischaracterization of Smith's view, for instance:

> Others besides Riegl have interpreted the structure of the Assyrian sacred tree as a reflection of furniture of some sort . . . [e.g.] S. Smith . . . and Frankfort. . . .[420]

Furthermore, scholars have adopted Paley's own disregard for the cult object theory, which is based on Paley's assessment of Smith's mistranslations and not on the cult object theory qua theory:

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[415] Paley, 1976, p. 23, 'The texts simply state: "I covered strong cedar wood and large teak wood with bronze."'

[416] Ibid., p. 24. Here Paley further characterizes the text as reporting 'a restoration accompanied by an apotropaic ritual, not a service centered around a sacred tree at New Year.' See n. 50 (pp. 27–28) for Paley's detailed analysis of this text.

[417] Ibid., '. . . Smith's idea seems to have been founded on an imperfect understanding of [the texts]. . . . Smith's thesis, which has been voiced for so long, should be abandoned.'

[418] Ibid., p. 23.

[419] There is no evidence from Smith's writings to show that Smith was a cult furniture theorist, or that the cult furniture theory 'originated with [him].'

[420] D. Castriota in Riegl, 1893 (1992), p. 326, note k.

> [The AST has been interpreted as] an artificial tree that was used as a piece of cult furniture. . . . Some years ago Paley observed that the notion that 'sacred trees' are images of actual cult furniture was based on a misunderstanding of texts that refer to the decoration of doorposts. In fact, there is neither textual nor archaeological evidence to support the existence of 'sacred trees' as cult furniture.[421]

Perhaps because Paley was intent on discarding Sidney Smith's translations, and with them the cult object theory, Paley also disregarded Frankfort's and Loud's interpretations of the Khorsabad material. He does not mention the Khorsabad or Nimrud material in his discussion.

It is therefore curious that in light of his mischaracterization of Smith as a cult furniture theorist, and his dismissal of the archaeological material, Paley, however, acknowledged the close visual parallels between the AST and a piece of furniture, that is, Aššurnasirpal II's throne depicted in relief (fig. **69a**). Although Paley quickly dismissed any parallel between 'trees' and thrones as meaningless, he unwittingly reintroduced Riegl's concept, which is useful for visualizing the AST as a cult object. For example, Paley observed that when he himself considered the AST as a piece of furniture, he saw that

> indeed, the tiers of the [Assyrian sacred/stylized tree] trunk . . . appear to be held together by a configuration . . . which was also depicted at the joints of furniture. In fact, Ashur-nasir-pal II's own chair had similar joints.[422]

Here Paley drew a comparison that we now know was first observed by Riegl, who had focussed on Aššurnasirpal II's throne depicted in relief, and specifically on the joins seen there on the cross-bar. Based upon this image of a throne that featured 'binding' elements, Riegl thought that the AST represents an object 'fitted together . . . with shafts connected by sheaths like those on Assyrian furniture.' The idea that the AST had been constructed using pieces like those seen on Assyrian thrones is a useful one, as it encourages us to consider the separate components of these so-called trees in detail. If the AST was built like a piece of cult furniture, we might then expect the building materials and configuration of the AST to match those of other known pieces of furniture, such as thrones, or perhaps poles used for support in architectural constructions.

It has been suggested that some architectural designs were inspired by furniture; and as an example we might consider the columns depicted in glazed brick relief on the facade of Nebuchanezzar's throneroom at Babylon (fig. 70). In describing these columns, the archaeologist Michael Roaf has observed that

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[421] Russell, 1998, p. 688.

[422] Paley, 1976, p. 23, and pl. 19b. Paley presented our fig. **69a** for comparison.

> The form of the columns with stacked volutes and horizontal binding is not architectural nor yet botanical but rather imitates furniture elements, as depicted on Assyrian reliefs.[423]

Roaf is thinking here of Aššurbanipal's 'Garden Party' (fig. **29**), and specifically the table depicted there in front of the king, which features sets of 'horizontal bindings,' which he thought compared well with the 'bindings' on the Babylonian columns. One could also compare the AST to the Babylonian columns and to Aššurbanipal's table. In comparing the AST in fig. **2** with the Babylonian column in fig. **70**, we see both are composed of a pole intersected by sets of the same horizontal bindings that appear on Aššurbanipal's table in fig. **29**. Furthermore, the 'trunk' or 'pole' of figs. **2** and **70** are crowned by floral elements, and it is this combination of 'binding' elements with floral elements that Roaf finds indicative of furniture design.

> . . . to my mind the column capitals [at Persepolis] are more closely paralleled in furniture than in architecture: the arrangement of double opposed volutes is a typical decorative device on stretchers of furniture, while the upright and drooping floral elements are found on the legs of tables and chairs.[424]

Roaf's comments return us to fig. **69a**, where we see 'double opposed volutes' appearing on furniture, similar to those appearing on the Persepolis columns. Following Roaf's examples, we can connect column design with AST design and both with furniture design. In retrospect, it may have been serendipitous that Paley mislabelled Smith a 'cult furniture' theorist. For in doing so he preserved Riegl's, Smith's, Loud's and Frankfort's reliance on metal bands and 'bindings' as the basis for the cult object theory.

Once we begin to see the AST as a representation of an object constructed of parts, we can continue with our analyses of the separate components that make up the AST. We see that the AST in fig. **2** has an inverted chevron design on its 'trunk,' a design we also find on poles supporting a royal canopy structure depicted in relief in fig. **50**. Also, we see that the AST in fig. **2** is comprised of a series of ridged crescents (pierced by sets of horizontal bands); if we focus on the bottom set of these ridged crescents, we see that the design in fig. **2** matches that of the pole capitals in fig. **50**. These design parallels may tell us more about the concrete nature of the AST than we have heretofore understood.

We also see that the AST has a floral arbor surrounding its 'trunk.' This arbor appears in different forms around a number of different versions of the AST. For example, the arbor surrounding the so-called AST on the eighth- to seventh-century BC cylinder seal in fig. **71** has been described as 'an arch decorated with spiked globes.'[425] We find decorated arches, or niches, around other subjects too, not just the AST. On an eighth- to seventh-century BC iron helmet from Nimrud (fig. 72), we see one such decorated niche, in the form of bronze inlay, that encloses the king, crown prince and an attendant.[426] The presence of such decorated niches, in different contexts, may indicate a demarcation of space, within which, or in front of which, objects, statues or people once stood. Perhaps the decorated niche on the helmet represents an actual niche set into a wall whose outside perimeter has been decorated. Or perhaps it represents a two-dimensional niche that decorated a wall and in front of which people and objects stood. Or it could represent a three-dimensional freestanding unit, under which people and objects stood. All these possibilities, when applied to the AST seen in Aššurnasirpal's palace, encourage us to think about the AST as a piece of cult furniture, as something that could be set up and, when necessary, taken down and stored.

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[423] M. Roaf, 'Architecture and Furniture,' in G. Herrmann, ed., 1996, p. 27.

[424] Ibid., pp. 27–28.

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[425] D. Collon's description in Curtis and Reade, 1995, p. 186, cat. no. 190. For the same description, see also Collon, 2001, p. 113 and pl. XVI, no. 211. The seal has been dated to the eighth to seventh century BC based on its inscription, a date Collon thinks accords well with the seal's style and iconography.

[426] The 'niche' appearing here has been described as a 'bud and garland border' by T. Dezsö and J. Curtis, 'Assyrian Iron Helmets from Nimrud now in the British Museum,' *Iraq* 53 (1991), p. 105. See pp. 122–24 and pl. XXa for a description of this helmet. See also Curtis and Reade, 1995, p. 172, cat. no. 173. Compare other Neo-Assyrian iron helmets from Nimrud (and now in the British Museum), also inlaid with bronze in the form of a decorated niche enclosing a deity standing on an animal; see Dezsö and Curtis, 1991, pp. 117–19 and J. and D. Oates, 2001, p. 248, fig. 157. Note that a composition of the AST flanked by Assyrian kings (quite similar to the Neo-Assyrian wall relief composition in fig. 1) appears on a crested conical Neo-Assyrian helmet now in Karlsruhe, dated to the ninth century BC (see Dezsö and Curtis, 1991, 115–16, 121, pl. XVIII).

16 The Khorsabad material

Loud had first described the poles found by Place outside the Sîn temple as decorated staffs and as trees; and he also described the pole that he had found outside the Šamaš temple as a tree. In seeing these pole and metal remains as 'trees,' Loud meant an artificial tree. In both cases, Loud was certainly influenced by Sidney Smith's translations and interpretation of the AST, which Loud included in his analysis.[427] After a brief interval of time, Loud decided that the 'decorated staff' (or standard) interpretation was preferable to the artificial tree interpretation. From his remarks, it would appear he chose the former on the basis of 'archaeological justification.'

> Rising vertically from the tableau shelves beside the major temple entrances are tall shafts of wood wrapped with embossed bronze in the form of gilded casing or of individual bands, they were unquestionably decorative. Their position only at temple portals, however, suggests a religious symbolism as well—possibly that of the sacred tree, made of cedar, which entered into the ritual of the Assyrian New Year festival. To Place's arbitrary restoration as palm trees [see our fig. **73**] two obstacles are encountered. Were branches actually those of living trees fastened to the tops of these great shafts, they would after a few days' time become a sorry sight. Were they artificial, in order to gain permanency, we must recognize in their creation an art or craft for which there is to date no archaeological justification. We are inclined therefore to believe that each of these shafts was originally topped by some formal standard, religious or otherwise, a simple knob . . . or a disk.[428]

Since Loud was not aware of any precedents for artificial trees composed of wood and metals, he abandoned this possibility. One could argue that the Khorsabad poles, particularly the ones standing outside the Sîn temple encased in a bronze sheath that had been embossed with an imbricated design—to resemble date palm trunks—constituted some archaeological justification for such an idea. However, a perceived lack of archaeological precedence coupled with the fact that neither Place nor Loud had found any crowning elements for the poles set Loud against an artificial tree reconstruction for the poles.

Frankfort also moved between an artificial tree and decorated staff/standard interpretation of the Khorsabad material. Since Frankfort had thought the Khorsabad wood and metal remains illustrated the Neo-Assyrian and

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[427] Loud, 1936, p. 98.

[428] Loud and Altman, 1938, pp. 44–45.

Neo-Babylonian texts that Smith had translated, Frankfort initially followed Smith's ideas. These included seeing the AST as a May-pole, a *djed* pillar and an *ashêrah*. Frankfort's general view, expressed over fifteen years, was that the AST represents an 'embellished artifact.'[429] In his last publication that covered the art of the ancient Near East over three millennia, Frankfort referred to the AST as 'highly artificial.'[430] There he discussed the formal links between Middle Assyrian sacred trees, in particular the so-called trees appearing at Kar-Tukulti-Ninurta (fig. **18**), and the AST. However, Frankfort noted a difference between Middle Assyrian 'tree' imagery as 'decorative' and its Neo-Assyrian counterpart as representing an actual object.

> . . . in Assyria a corresponding symbolism finds expression in the purely artificial designs of . . . [our fig. **13**], which, at a first glance, might appear to be used as pure decoration. Now there are sufficient instances of the performance of ritual acts in connection with the artificial 'sacred tree' to exclude ornamental preoccupations as its source. We know, moreover, that a bare tree-trunk, round which metal bands called 'yokes,' were fastened, was used in the New Year's Festival in Assyria, in contrast with the usage of the south. In Syria, too, a 'bedecked maypole' was an object of worship. . . .[431]

In addition to reconstructing the AST as a bare tree trunk around which metal bands had been placed as Smith had thought, Frankfort also proposed another reconstruction that united Smith's 'May-pole' idea with the Khorsabad metal remains. In his description of our fig. **15**, as well as other AST-types, he described them as

> . . . very artificial structure[s] . . . which are unintelligible as the rendering of natural trees but not so if they represent the ritual object consisting of a pole ornamented with copper bands, cloth and ribbons, the *ashêrah* of pre-Israelite Canaan. In this respect too they resemble their equivalent, the Djed-pillar in Egypt.[432]

Frankfort thought that the AST could be reconstructed either as an artificial tree or as a decorated standard, based in part on his own understanding of the Khorsabad material. At this early stage in the development in the cult object theory, Frankfort's tendency to see the AST as both an artificial tree and as a pole was judicious. In fact, both interpretations are supported by material remains excavated in the nineteenth and early twentieth centuries, which, though available to Frankfort (and Loud for that matter), do not appear in his analyses. We will analyze that material below in part IV.

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[429] Frankfort, 1948, p. 409, 'We cannot describe the Assyrian celebrations [of the New Year's festival] in detail. They differed in some respects from those at Babylon, especially in the part played in the north by the sacred trees—an artifact consisting of a trunk with metal bands and other embellishments.'

[430] Frankfort, 1954 (1979), pp. 135–37, 142.

[431] Ibid., p. 137.

[432] Frankfort, 1939 (1965), pp. 206–7. Our fig. **15** = Frankfort's pl. XXXIIIa.

During the course of Frankfort's professorship in Chicago, his student, Helene Kantor, analyzed the origins of floral decoration in the ancient Near East for her Ph.D.[433] Kantor tells us in her preface that Frankfort suggested the topic to her and that it was written under his guidance. We should therefore not be surprised to feel Frankfort's influence on her work; however, it would be inaccurate to wholly attribute Frankfort's (and therefore Smith's) view of the AST to Kantor as some have recently suggested.[434]

Kantor's assessment of Middle and Neo-Assyrian plant ornament was mainly concerned with exposing the various influences that contributed to the floral forms prevalent in these two periods. Her expertise involved tracing the forms of examples of ASTs and Middle Assyrian 'sacred trees' (fig. **18**) back to their origins. In so doing, she agreed with Frankfort that Neo-Assyrian 'tree' forms had their immediate and obvious origin in the Middle Assyrian forms.[435] However, she found Smith's and Frankfort's reliance on a cult pole explanation for the AST not entirely helpful in her search for Middle Assyrian forerunners.

> [Our] detailed discussion of Middle Assyrian developments . . . enables us to claim that, though in symbolic value the hybrid [sacred or stylized] trees may be identical with the cult poles, the shape of the former is conditioned only by the combination of certain naturalistic Mesopotamian traits with formal decorative designs derived from Egypt, but mediated by Mitannian, and possibly to a lesser degree by Second/Third Syrian glyptic designs. The mingling of these two traditions appears to be sufficient to explain the origin

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[433] H. J. Kantor, 'Plant Ornament, Its Origins and Development in the Ancient Near East,' Ph.D. diss., University of Chicago, 1945, rev. 1999. Kantor received her degree in 1945 based on a conspectus of the project (i.e., summary of the contents of the work) and in the expectation that the entire project would soon be published as a book. It was not, and instead parts of sections 2 and 3 were reworked for publication as 'The Aegean and the Orient in the Second Millennium B.C.,' *American Journal of Archaeology* 51 (1947), pp. 1–103 (also issued in the same year as *Archaeological Institute of America Monograph* 1). She continued work on the project for the next forty years and at her death left an expanded book-length manuscript to the Oriental Institute at the University of Chicago. The manuscript was made available to the public in 1999.

[434] E.g., see Winter, 2003, p. 261, n. 6, who interpreted Kantor's position vis-à-vis Smith's, '. . . see Kantor, 1945 (1999), p. 749, who cited Smith [1928, p. 123], following his thesis that [ASTs] were indeed "sacred trees," associated with the god Aššur and with an actual symbol constructed and used in the New Year Festival. Kantor considered the trees to be representations of hybrid plants made up of bare tree trunks, elaborated by copper bands, cloth and ribbon, that were set up at the portals of Assyrian temples.'

[435] See Kantor, 1945 (1999), e.g., p. 650, 'The Middle Assyrian period is the crucial phase in the development of Assyrian art'; p. 744, 'No Late Assyrian design yet cited has been anything more than a modification of Middle Assyrian prototypes'; p. 745, 'The contribution of Late Assyrian artists to plant ornament was a relatively minor one. They gave the last formalizing touches to motives which had been created by Middle Assyrians.'

> of the Middle Assyrian hybrids without reference to the 'maypoles,' for the actual appearance of which we have very little evidence.[436]

Kantor did not necessarily disagree with a pole interpretation of the AST; she did, after all, quote Smith's and Frankfort's views on the topic.[437] But to describe her as a pole or cult object theorist who followed the views of Smith or Frankfort is debatable.[438] Kantor thought the AST represents an artificial form, and this resonated with Frankfort's idea that the AST represents an artificial tree. However, she arrived at this conclusion via a different route from that taken by either Smith or Frankfort. For Kantor was interested in an altogether different type of evidence, namely, the course of development of artificial plant decoration that produced the AST.

Kantor regarded the AST as composed of separate parts, and this perspective resonates with Riegl's overall approach to the study of plant forms, more so than with either Frankfort's or Smith's specific ideas concerning the AST that focussed on ritual. Kantor demonstrated that certain features of the AST were located in specific Middle Assyrian plant forms that were themselves artificial, and she convincingly showed that the AST is a conglomerate of these Middle Assyrian forms. Since Kantor saw the AST as a composite 'tree' type made up of artificial plant parts, she was opposed to the view that the AST represents the design of one tree, for example a stylized date palm.[439]

Kantor analyzed three features that she found specific to the AST, features that she argued could not be found in the real world of plants and trees and that therefore demonstrated the artificiality of the AST. First, she described the 'arbor' (e.g., of palmettes in figs. **1–2**) surrounding the 'trunk' of the AST as a 'definite Assyrian feature' that found its origins in Middle Assyrian examples.[440] In referring to the 'arbor' as an 'accessory ornament' and in describing it as 'bewebbed' or as composed of 'ribbons,' Kantor was expressing her basic view that the AST was composed of artificial elements.[441]

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[436] Ibid., p. 711.

[437] Ibid., pp. 711, 749.

[438] Kantor did not convey the feeling that she necessarily agreed with Smith and Frankfort's views, using such phrases in Kantor, 1945 (1999), p. 749 as, 'It seems evident as Sidney Smith and Frankfort have pointed out. . . .' and 'Frankfort refers to the evidence that tall cedar poles ornamented with copper bands were set up at the portals of Assyrian temples. . . .' It seems to me that Kantor quoted Smith's and Frankfort's ideas on the AST without expressing her own view on their veracity.

[439] Kantor referred to composite or 'hybrid' trees, such as the AST, as 'trees' (in quotes). See, e.g., Kantor, 1945 (1999), p. 563. This further suggests that she did not view the AST as a representation of an actual tree.

[440] See ibid., p. 654, 'A final, quite definite Assyrian feature is the ['arbor' or] accessory ornament added alongside the trunk of the otherwise normal Mitannian hybrid.' Kantor found precursors for the AST's 'arbor' in Middle Assyrian–dated Syrian and Canaanite examples as well as in the wall paintings at Kar-Tikulti-Ninurta: see esp. pp. 683–90.

[441] For her description of the AST's 'arbor' as 'bewebbed,' see ibid., e.g., pp. 683, 691; for the 'ribbon' description, see, e.g., p. 752.

Kantor traced the 'palmette' element seen crowning (and surrounding) AST examples (e.g., figs. **1–2**) to Mitannian and 'Second Syrian' seal examples; and she described this element that first appeared in the Middle Assyrian period as an 'unobtrusive, apparently minor feature that should be noted, for it was to serve an important role in the production of Late [Neo] Assyrian "sacred trees."'[442] As with the 'arbor' element, Kantor also treated the palmette as another discrete part of the AST, referring to it also as an 'accessory element.'[443]

The third feature of the AST that Kantor identified as specifically Neo-Assyrian and as specifically artificial is the 'c-clamp,' or 'double crescent binding element,' that we see on the AST in figs. **1–2**. Kantor's own study of plant forms argued against von Luschan's and the Wurz brothers' view that this c-clamp or binding could be traced back to certain plants or trees. Her analyses therefore confirm what Riegl had claimed: that the binding element is an artificial form.

> One feature [of the AST] is remarkable and requires explanation. This is the appearance of the c-clamp. This feature does not seem to have any basis among earlier patterns. Midway in the trunks of some 'trees' and sometimes at the top is to be found an element composed of two vertical c-curves bound by one or three horizontal bands. This 'c-clamp' motive, as we may call it, is quite distinct from the older volute elements, although when the clamp appears at the top of a trunk, its upper curves do displace down-curving volutes. In looking for an explanation for the c-clamp we at once notice that a similar motive appears in a series as an ordinary decoration on the stretchers of Assyrian furniture.[444]

It is noteworthy that Kantor did not cite Riegl here for support. Rather she cited Smith and Frankfort and their views on decorating tree trunks with metal bands, which were based on Smith's translations of texts and the Khorsabad material. Further, it is curious that, even though Kantor saw herself as augmenting Riegl's work of tracing early plant decoration, she did not cite the substance of Riegl's ideas concerning the AST, which corresponded with her own.[445] Perhaps this is because Kantor assessed the artificiality of the AST design from a slightly different angle from that taken by Riegl: whereas Riegl had analyzed the artificiality of the AST based on its parallels with furniture, Kantor had closely analyzed the formal development of ancient Near Eastern plant decoration that led her to conclude the

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[442] Ibid., p. 673.

[443] Ibid., p. 705.

[444] Ibid., pp. 748–49.

[445] See ibid., pp. 1–2, where Kantor expressed the aims of her project as allied with those of Riegl, 'The vast amount of new evidence for ancient Near Eastern art accumulated since Riegl's *Stilfragen* makes it fruitful to trace in detail the early story of plant ornament; that is one of the principal tasks of this book.'

AST is an artificial form. Her analyses of the artificial nature of the AST led her beyond Riegl's conclusions, to the belief that the AST represented a meaningful and 'definite symbol.'[446] This idea that the AST represents a (cult) symbol made its way in a rather desultory fashion into the twentieth century via the likes of Langdon, Speleers and then Kantor.[447]

Other scholars relied on Smith and Frankfort for support for the cult object or artificial tree theory post-Kantor (1947–66). In the work of Porada, the philologist Geo Widengren, Mallowan and Parker, we find references to Smith's translations and/or Frankfort's resuscitation of Smith's translations accompanied by the Khorsabad evidence.[448] Mallowan and Parker also used the phrase 'portable tree' to describe different types of 'sacred trees' held by figures appearing on Middle and Neo-Assyrian dated seals.[449] An interpretation of these 'trees' as moveable followed from Mallowan's and Parker's view of them as artificial objects. Parker also used the term 'artificial tree,' 'artificial sacred tree,' 'artificial tree or standard,' as well as 'column (perhaps the sacred tree),' to describe different types of ASTs appearing on seals found at Nimrud.[450] Her terminology is not systematic; that is, she did not set out to define one type of AST as a 'sacred tree,' another as an 'artificial tree' and yet another as an 'artificial sacred tree.'[451] Rather, the nature of her descriptions, which reflected the influence of Smith and Frankfort, indicated her overall view that the AST represents an artificial object. This manner of referring to the AST as an 'artificial sacred tree' appeared in other publications as late as the mid-1970s.[452]

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[446] Ibid., p. 748, 'In almost all the examples of twigged trees quoted [i.e., various AST-types], the plant motive appeared as the central element of the composition, usually flanked by winged genii with basket and cone, or by animals, or by human figures who grasp the streamers dependent from the winged sun disc placed above the tree. Thus the tree seems to possess more meaning, to be a more definite symbol, than it had on many Middle Assyrian seals, where it frequently occurred as a decorative or landscape element, rather than as a cardinal part of the scenes rendered.'

[447] Van Buren, 1945, p. 27, also supported this idea in her evaluation of 'sacred trees' in Mesopotamian art when she wrote, '. . . the severely formalized sacred tree of the first millennium [BC] . . . no longer bore any semblance of reality, but had become an elaborately constructed sacred symbol.' And p. 29, '[The sacred tree] increasingly became a thing of artifice instead of a living organism. . . .' Later see Stearns, 1961, p. 68, 'In view of the obvious conventionalization of the tree [AST] in the reliefs and the wide variety of its modifications in Mesopotamian art in general, further discussion of the botanical identity of the tree seems unfruitful. At all events, it is the meaning of the tree as a symbol which would be of more help in understanding the reliefs, but here too the hypotheses advanced by scholars are so varied as to render a clear solution unlikely at present.' Note also that van Buren, 1945, A4, and Black and Green, 1992, fig. 76, placed an AST-icon in their respective diagrams of 'symbols of the gods,' i.e., an emblem signifying a deity.

[448] E.g., see Porada, *Seal Impressions of Nuzi, The Annual of the American Schools of Oriental Research*, vol. 24 for 1944–45, New Haven, 1947, pp. 110–11 (concerning the iconography of the 'ritual motives,' on Nuzi seal impressions, e.g., the 'tree'), '. . . the representations of the dance with the tree confirm the theories of Sidney Smith and Frankfort concerning rituals performed with a tree in Assyria and even demonstrate the character of what was perhaps the most basic of these rituals, "the dance with a maypole."' Further see her p. 111, n. 233, where Porada cited Frankfort, 1939 (1965), p. 205, n. 1, and Smith, 1928, p. 128. Also see G. Widengren, *The King and the Tree of Life in Ancient Near Eastern Religion, Uppsala Universitets Årsskrift* 4, Uppsala, 1951, p. 7, '[Sidney] Smith has shown that the [Assyrian] tree has a very important function to fulfil in the cult and stresses the fact that this tree is not a real one, but a cult tree, a trunk decorated with metal bands and fillets.' Further see his p. 7, n. 4 and p. 5, n. 3, where Widengren cited Smith, 1926–28, p. 72. Also see M. Mallowan, 'Excavations at Brak and Chagar Bazar, Part III, Catalogue,' *Iraq* 9 (1947), p. 140 and n. 1, in reference to pl. 22, 2; Mallowan, 1966, p. 145 and fig. 85; and B. Parker, 'Excavations at Nimrud, 1949–1953, Seals and Seal Impressions,' *Iraq* 17 (1955), pp. 105–6, in reference to ND 751, pl. 17, 2, who noted that Middle Assyrian and Neo-Assyrian-dated cylinders showing 'trees' depicted with horizontal bands across their 'trunks' could represent the bare trunks or poles with metal yokes or bands that Smith had found in texts and that Frankfort had described found outside the Khorsabad temples.

It was also during this period of time that Kyrieleis analyzed the AST in his monograph on ancient Near Eastern and Greek furniture. Kyrieleis' examination of the AST as a piece of furniture stands as the most recent and comprehensive review we have of the material evidence, as well as of the interpretations of Riegl, Puchstein, von Luschan and the Wurz brothers. Moreover, Kyrieleis believed that the AST represents a three-dimensional object, which he deduced from his analyses of the binding elements appearing on the AST.

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[449] See Mallowan, 1947, p. 139, pl. 22, 2, in reference to a cylinder found at Tell Brak dated to 1500 BC; and see Parker, 1955, p. 107, ND 3201, pl. 18, 4, in reference to a stamp found at Nimrud and dated to the eighth or seventh century BC.

[450] E.g., see Parker, 1955, pp. 114–15, ND 2328, pl. 23, 1 and text fig. 5, and pp. 105–6, ND 751, pl. 17, 2 ('artificial tree'); p. 121, ND 3422, pl. 27, 4 and text fig. 19 ('artificial sacred tree'). See also, e.g., Parker, 'Seals and Seal Impressions from the Nimrud Excavations, 1955–58,' *Iraq* 24 (1962), p. 28, ND 5262, pl. 9, 1, and p. 33, ND 6028, pl. 16, 1, and p. 35, ND 7834, pl. 18, 1 ('artificial tree'); and p. 36, ND 7049, pl. 19, 2, ('artificial tree or standard'); and p. 37, ND 7046, pl. 19, 3 ('column [perhaps the sacred tree]').

[451] E.g., compare the same AST-type that Parker described in two different ways in Parker, 1955, p. 99, ND 3582, pl. 12, 1, where she described an AST as a 'sacred tree' and Parker, 1962, p. 28, ND 5262, pl. 9, 1, where she described an AST as an 'artificial tree.' In fact, Parker used other terms to describe the AST, including 'sacred tree' and 'stylized tree' (see Parker, 1955, passim).

[452] E.g., see T. Madhloom, 'Types of Trees,' *Sumer* 26 (1970), pp. 138–39. Madhloom described Middle Assyrian and Neo-Assyrian 'sacred trees' as 'artificial' and, like Kantor, noted that their composite forms argued against their origin in one source (i.e., as representing a stylized version of one tree type). Madhloom also thought that the activity happening around the AST as in, e.g., our figs. **1–2**, illustrated 'ritual performances' (p. 137). Taken together, such descriptions suggest that Madhloom had sympathies with the cult object theory. See also York, 1972–75, p. 270, 'In essence the sacred tree cannot be comprehended as a specific botanical species nor as a single mythic or cultic entity, but rather as a concept common to the entire ancient Near East, represented by each region and period in accordance with its stock of developed significant images'; and also p. 278, 'The Assyrian tree [AST] is completely non-naturalistic, an artificial ritual form associated with Assur. . . . The tree may be a corollary in art for rituals which occurred in connection with actual trees or posts (recalling the use of ritual posts or *ašerīm* of the western Semites).'

In a section devoted specifically to double-volute binding elements, Kyrieleis laid out his interpretation of the AST.[453] He began by discussing the double-volute bindings found at Nimrud, reconstructed as belonging to the cross-bar of a Neo-Assyrian throne (figs. **68–69**). Based on parallels with Urartian metal double-volute bindings from Altıntepe, Kyrieleis argued that the function of the double-volute bindings found at Nimrud could not have been structural (or 'technical') but was rather decorative.[454] Kyrieleis then noted Riegl's observation that these double-volute binding elements are not restricted to furniture in the ancient Near East but appear in other connections, in particular on the AST. Kyrieleis, however, refined Riegl's observation by differentiating between the double-volute binding elements found on furniture (figs. **68–69**) and the double-crescent binding element also found at Nimrud (fig. **67**) that appear on the AST (fig. **1** and cp. fig. **49**). Kyrieleis argued that the double-crescent binding element seen on the AST, though different in form, must have been purely decorative in function, too.

Using Puchstein's comparison between the double-crescent binding element found at Nimrud and the canopy struts depicted in relief on the Balawat Gate (figs. **66–67**), Kyrieleis set out to demonstrate the similarity between the placement and form of binding elements seen on the canopy struts and on the AST (cp. figs. **1** and **66**). Following a close analysis of the form of the double-crescent binding elements as they appear on poles elsewhere, Kyrieleis concluded that (1) the double-volute binding element is horizontal in construction, appearing mainly on support cross-beams of furniture, and (2) the double-crescent binding element is vertical in construction, appearing mainly on the front of poles and ASTs. He also noted that the double-crescent binding element is the only binding type to appear on poles and ASTs.

From this we can conclude that whenever we see binding elements appearing in a vertical order, we can assume they will be double-crescent in shape (e.g., fig. **67**); and that whenever we see binding elements appearing in a horizontal order, we can assume they will be double-volute in shape (e.g., figs. **68–69**). To prove this point, Kyrieleis presented an example from Sargon II's palace at Khorsabad—a relief of two men carrying an elaborately decorated throne (fig. **74**).

> Mit anderen Worten: immer da, wo das 'Volutenbündel' in senkrechter Anordung auftaucht, sind die Voluten halbmondförmig, bei waagerechter Anordung dagegen schneckenförmig. Daß dies kein Zufall sein kann, wird anschaulich erwiesen durch die Relief-Darstellung eines Tisches aus dem Sargon-Palast in Khorsabad [see our fig. **74**]. Hier erscheint über den waagerecht aufgereihten Volutenbündeln der Querstrebe eine Reihe von 'heiligen Bäumen,' deren Schäfte mit Volutenbündeln verziert sind. Im Gegensatz zu den schneckenartig eingerollten liegenden Voluten der Querstrebe sind

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[453] See Kyrieleis, 1969, pp. 91–97 ('Volutenbündel').

[454] See now Seidl, 1996, pp. 184–86, pl. 57.

> die senkrecht stehenden Voluten der ‘heiligen Bäume’ aber halbmondförmig gebildet. Dieses Nebeneinander beider Formen an ein und demselben Möbelstück macht sehr deutlich, daß es sich im Grunde um zwei verschiedene Dinge handelt, die voneinander zu trennen sind.[455]

This throne example is an intriguing one for cult object theorists because it depicts an actual object (a throne), which makes the ASTs seen in this context also actual objects—even if only as part of a constructed unit. This AST-type appears elsewhere, for instance, on Esarhaddon’s clay prisms seen in fig. **75**.

We know that the Neo-Assyrian throne represented in fig. **74** is very likely a depiction of an actual three-dimensional object because of Neo-Assyrian parallels found at, for example, Nimrud. And we also know that the Neo-Assyrian double-volute binding elements represented there on the cross-bar beneath the ASTs are very likely depictions of actual three-dimensional objects because of Neo-Assyrian parallels found at, for example, Nimrud and Altıntepe. A logical extension of this knowledge demands that we consider it very likely that the ASTs depicted on the throne also represent actual three-dimensional objects. This was certainly Kyrieleis’ view, also evident from his description of the AST and Balawat canopy posts (or ‘struts’) as depicted ‘in profile’ on the reliefs.[456]

Scholarly interest in the artificial tree or cult object theory died with Kyrieleis’ research and had been buried for about thirty-five years before it was revived in 1994 with the art historian Pauline Albenda’s analysis of AST reliefs in the Brooklyn Museum.[457] Albenda noted a range of possible interpretations of the AST, and she included among them the cult object theory. Indeed, her analytic approach has much in common with artificial tree and cult object theorists, particularly Kantor and Riegl; however, she appears to have come to similar conclusions on her own.[458]

To begin with, Albenda assumed that the AST represents an actual object.

> We will assume that the model for the sacred tree on the stone reliefs was an object of concrete form. The central element of the tree is a trunk set upon a

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[455] Kyrieleis, 1969, p. 96.

[456] Ibid., pp. 95–96.

[457] See Albenda, 1994, pp. 123–33.

[458] Albenda (ibid.) did not cite any cult object theorists in her notes or refer to the Nimrud or Khorsabad metal attachments. In one note (p. 123, n. 8), she provided an abbreviated bibliography for all the possible theories of the meaning of the AST, i.e., as ‘a stylized palm tree, a cult object, an emblem of vegetation or “tree of life,” an imperial symbol, or a combination of all those forms.’ Albenda referred the reader to, among others, Danthine, 1937—the only scholar listed who might have provided Albenda with some insight on the *ashêrah* and cult object theories. See Danthine, 1937, pp. 140–43, 151, for brief summaries of some cult object theorists; note, however, that Danthine’s list is not extensive; e.g., she did not cite Riegl, 1893.

> base. It is surmounted by a plant motif which consists of seven large fronds arranged into a palmette. The trunk is generally divided into three tiers . . . of varying heights and widths, with each tier appearing to be an independent element. The trunk is probably made from separate pieces of timber which are fastened at the joints by a device that is decorative yet functional. The binding device has two components: a prominent three-ringed band and, between the band and the ends of the timber on either side, a C-shaped brace showing petal-like decorations along its outer length. . . . In addition to their obvious decorative aspect the [ribbonlike] stem and garland [which surround the tree on three sides], together, may function as a means to prop up the trunk of the tree.[459]

We have seen these ideas before: that the AST represents a three-dimensional object, that its 'trunk' was composed of parts and that these parts were joined together by binding elements. Riegl and Kyrieleis come to mind, as does Kantor; Albenda's 'C-shaped braces' is a description quite close to Kantor's 'c-clamps.' Without ostensibly turning to the ideas of her predecessors, how did Albenda arrive at these same conclusions and even develop similar terminology?[460]

Albenda set out to show that a selection of ASTs carved in relief—namely, those housed in the Brooklyn Museum—differ in the rendering of specific details. She discerned three different AST-types that she termed 'rayed,' 'lattice,' and 'double-garland.' (E.g., our fig. **1** is an example of her 'rayed' type, and our fig. **2** is an example of her 'lattice' type.) She arrived at these descriptions by close formal analysis of each AST, dissecting its entire form into separate components and then comparing the components of different 'tree' types.[461] Albenda's method of differentiating, comparing and cataloguing AST-types independently produced the same sorts of conclusions reached by Riegl, Kantor and Kyrieleis. It is noteworthy that once she had engaged this perspective, Albenda regarded the AST as a divine symbol, one that was set up for worship. Therefore, she concluded that in

> Accepting the identification of the sacred tree on the wall reliefs as a divine symbol, the so-called pollination scene must then portray the Assyrian king and genies as receiving energy and power *from* the tree, rather than fertilizing it, as is generally thought. In this regard, it is worthy to observe that

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[459] Albenda, 1994, p. 124. See also p. 132, 'The trunk may represent the stand or pedestal upon which [a] flower [of the *Compositae* or *Rosaceae* family depicted as a palmette] rests and, together, the palmette and stand are shaped to resemble a palm tree.'

[460] See ibid., p. 132, n. 29, for the analogy she used that informed her ideas about AST-construction and metal attachments. From this note it is clear that Albenda did not use the analogy of ancient furniture construction but rather turned to ancient mirror construction for her ideas.

[461] Earlier see Bleibtreu, 1980, pp. 37–39, who also recognized that the AST is composed of discrete components.

> Ashurnasirpal II has an identical gesture—raised right hand clenched with one finger extended—when he faces the sacred tree and deity in the winged disk . . . [and when he faces] the five symbols of deities on his stele from the Ninurta temple.[462]

Albenda reached the conclusions of her nineteenth-century forebear Rawlinson, who had also regarded the AST as a symbol of worship and the cone as 'if it were the means of communication between the protector and the protected, the instrument by which grace and power passed from the genius to the mortal whom he had undertaken to guard.'[463] Her method of comparing the gesture that Aššurnasirpal II directs at the AST as well as at other figures, such as symbols, is the kind of method Langdon had applied to cylinder seal imagery seventy-five years before.[464] It is conceivable that Albenda reinvented the ideas of her predecessors because these ideas make the most sense to anyone who sees the AST as a discrete form made of parts that can be analyzed separately.[465] Her conclusions show us that a review of the cult object theory has long been overdue and that criticisms of this theory can only be addressed once the material remains have been systematically laid out for discussion.

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[462] Albenda, 1994, p. 133 (emphasis hers).

[463] G. Rawlinson, vol. 2, 1864, pp. 263–64.

[464] Langdon, 1919.

[465] However, for those who do not see the AST as made up of discrete parts, Albenda's ideas will seem unrealistic. See, e.g., Russell, 1998, p. 688, '. . . Albenda [1994] assumed that "the model for the sacred tree on the stone reliefs was an object of concrete form," that is, an artificial tree that was used as a piece of cult furniture. The trees in the reliefs appear stylized, therefore, not because they themselves are idealizations, but rather because they are literal copies of concrete pieces of furniture. This is not a new idea. Some years ago Paley observed that the notion that "sacred trees" are images of actual cult furniture was based on a misunderstanding of texts that refer to the decoration of doorposts. In fact, there is neither textual nor archaeological evidence to support the existence of "sacred trees" as cult furniture.'

PART IV

Artificial Trees in the Archaeological Record

17 Artificial trees

Mid-nineteenth-century European excavations in Iraq first brought to light the remains of artificial tree parts. Victor Place's excavations at the Neo-Assyrian royal city of Khorsabad recovered large pieces of bronze sheathing embossed with the design of palm tree trunk scales or imbrications, which Loud would later discuss during his own excavations at the site (fig. 76).[466] These pieces of bronze sheathing had once been nailed to a shaft of cedar that measured 9 m in length and .5 m in diameter; another cedar shaft measuring relatively the same thickness and length was found nearby.[467] Each originally stood on either side of the entrance to the Sîn temple (identified by Place as entrance 'Z of the harem' of Sargon II's palace complex). A fragment of gold sheeting, also embossed with palm trunk imbrications and pierced with holes, was found near the latter cedar shaft. Its location, dimensions, design and nail holes led Place to believe that the gold fragment must once have gilded the bronze-encased poles.[468]

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[466] These are the same pieces of bronze sheathing discussed in chapters 15 and 16 above and that Loud referred to in, e.g., Loud, 1936, p. 98. See V. Place, *Ninive et l'Assyrie*, t. 3 (planches), Paris, 1867, pl. 73, 'Bronze fragments de l'enveloppe d'un palmier, porte Z. du harem.' Having seen them on display, I estimate that the two fragments (from left to right) measure 19.6 cm long (at its longest) and 9.8 cm wide (at its widest), and 17 cm long and 10.3 cm wide. They are reproduced (and reduced) by Perrot and Chipiez, t. 2, 1884, fig. 72.

[467] See Place, *Ninive et l'Assyrie*, t. 1, Paris, 1867, pp. 120–21, 'Pendant que les excavations . . . nous rencontrâmes un objet dont la nature nous préoccupa pendant un assez longtemps: c'était une feuille en bronze, très-oxydée, de forme primitivement cylindrique, mais un peu déprimée par le poids des décombres. Dans l'intériuer du cylindre se trouvait une pièce ronde de bois de cèdre, dont il a été facile de reconnaître l'essence au premier aspect, tant ce morceau de bois était bien conservé; le métal, traversé de clous nombreux, également en bronze, servait à le recouvrir. L'enveloppe en bronze n'était pas lisse; elle présentait une série de saillies ovales, imbriquées ayant une certaine analogie avec des écailles de poisson (voir pl. 73). Cependant le dégagement se poursuivait, rendant de plus en plus clair l'aspect de ce morceau; et, lorsque je vis sur une longueur de neuf mètres le cylindre rester de la même grosseur dans toute son étendue, je soupçonnai que les Assyriens avaient eu l'intention de fabriquer, non pas un poisson, mais un arbre semblable aux arbres de quelques bas-reliefs. [Later see Perrot and Chipiez, t. 2, 1884, p. 213 and fig. 27, who compared the imbricated bronze casings at Khorsabad to the trunks of date palms depicted in Aššurbanipal's 'Garden Scene.'] Je continuai les fouilles avec l'espoir d'obtenir de plus amples renseignements . . . à l'angle le plus voisin de l'entrée, au-dessus de la tête du lion [on the enamelled brick wall relief], je trouvai l'explication objet de mes recherches. Dans un trou profond . . . existait encore un fragment d'une pièce de cèdre, identique pour la qualité et la grosseur à celle que nous avions rencontrée un peu auparavant et qui était enveloppée d'une feuille de bronze. Le morceau long de neuf mètres, trouvé étendu sur le sol. . . .'

[468] The Khorsabad gold sheeting is also inscribed with a line of cuneiform. See Place, t. 1, 1867, p. 121, 'Une trouvaille fort inattendue, et opérée dans le voisinage du mur colorié, me ferait

Place reconstructed the original height of the bronze/gold-covered poles at 10 or 11 m. He portrayed them as two bronze and gold palm trees standing on either side of the temple's entrance, even though he had not found any metal leaves there (see fig. **73**).[469] Perrot and Chipiez provided a parallel for the Khorsabad metal-encased poles by comparing them to one(s) depicted on a limestone plaque found at Sippar (fig. 77), dated to the reign of the Babylonian king Nabû-apla-iddina (in power c. 900 BC).[470] On that relief, worshippers approach an aniconic and anthropomorphic form of the god Šamaš. A canopied structure encloses the human form of the god. Perrot and Chipiez argued that the column(s) supporting the canopy were made of wood and covered in a casing of bronze embossed with palm trunk imbrications. The bronze covering would have protected the wooden posts, and the imitation of palm tree bark would have been both decorative and appropriate in a temple setting. The voluted base and capital, according to Perrot and Chipiez, must also have been wrought in metal. Their interpretation of an imbricated bronze pole decorated with voluted bronze base and capital provides an alternative reconstruction to Place's idea that bronze palm trees stood on either side of the entrance to the Sîn temple at Khorsabad.[471]

Another alternative reconstruction for the Khorsabad imbricated sheathing/poles appears on Isin-Larsa (c. 2025–1763 BC) and Old Babylonian (1894–1595 BC) clay plaques that feature one or two bull-men standing at the side of a 'palm trunk' crowned with a sun disk or crescent moon symbol (e.g., fig. **78**).[472] Perhaps the Khorsabad metal palm trunks carried symbols.

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encore attribuer au palmier un autre genre d'ornement. Une feuille d'or, actuellement au Louvre, gisait parmi les décombres non loin du tronc brisé étendu sur le pavé; elle porte une ligne d'inscription cunéiforme, et de plus, malgré la pression du poids des terres, on retrouve à sa surface le même dessin ovale signalé sur la gaîne du palmier. En outre, cette feuille est percée de trous indiquant qu'elle enveloppait un objet cylindrique sur lequel elle était fixée par des clous. Sa position, ses dimensions, sa forme, tout tend à la rattacher en effet au palmier, et elle aurait été appliquée par-dessus la première gaîne comme pour en dorer le bronze.' For reference to and/or a description of this gold piece of 'bark,' see also Perrot and Chipiez, t. 2, 1884, p. 214; M. Pillet, *Khorsabad, Les découvertes de V. Place en Assyrie*, Paris, 1918, p. 82; and Pottier, 1924, p. 127. Pottier provided its measurements: height 135 cm, width 33 cm. This piece is now in the Louvre (acc. no. N111 3147).

[469] Place, t. 3, 1867, pl. 24 ('palais ensemble de la porte Z du harem') is printed in color. The reconstructed leaves and trunk of the palm poles are rendered in a bronze color, following Place's idea that the bronze-gold-encased poles were actually metallic palms.

[470] See Perrot and Chipiez, t. 2, 1884, pp. 209–13, and fig. 71.

[471] Ibid., pp. 214–15.

[472] There are a number of examples of such imbricated 'tree' trunks topped by symbols. Direct parallels with our fig. **78** include OrInst A 16997. For this see H. Hill, T. Jacobsen and P. Delougaz, *Old Babylonian Public Buildings in the Diyala Region, Pt. 1, Excavations at Ischali; Pt. 2, Khafajah Mounds B, C, and D,* Oriental Institute Publications, vol. 98, Chicago, 1990, pl. 34k; compare also Khafajah VIII: 171 reproduced on pl. 62j; and AO 12446 and AO 6985 (Louvre): for these see M.-T. Barrelet, *Figurines et reliefs en terre cuite de la Mésopotamie antique, I, Potiers, termes de métiers, procédés de fabrication et production, Bibliothéque archéologique et historique*, t. 85, Paris, 1968, pl. 81, nos. 815–16. Compare also clay plaques of figures standing on either side of spiral-like 'trunks' crowned by

Loud and Altman first suggested this in 1938; Barrelet suggested it again thirty years later.[473]

While Place had found metal 'bark' at Khorsabad, Jacques de Morgan and Roland de Mecquenem found various types of bronze leaves and branches during their excavations at Susa in the early twentieth century. These bronze plant elements were buried together with an extensive number of other objects as part of a deposit located in the Inshushinak temple precinct on the 'Acropole' mound.[474] The excavators dated the deposit from the fourteenth to eighth centuries BC, but later opinion has circumscribed the date to the thirteenth to twelfth centuries BC (the Middle Elamite period).[475] The deposit consisted also of a large number of precious objects, such as gold, silver, lead and bronze jewelry, figurines and amulets, as well as cylinder and stamp seals, weapons and vases. It had been suggested at the time of retrieval that these objects were intended as a foundation deposit for the Inshushinak temple. More recently it has been thought the objects were intended for chapels dedicated to royal funerary cults of the king and his family.[476] It has been pointed out that the quantity and precious nature of the objects connect them to royalty. Also, their location at the foot of the Inshushinak ziggurat suggests that these objects were highly esteemed.

In another deposit nearby, de Morgan found the smallest example of a bronze leaf (see fig. **79**; 2.8 cm long and wide, with a ring for attachment), together with other pieces of jewelry, vases and seals. De Morgan wrote

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various symbols in, e.g.: R. Koldewey, *Die Tempel von Babylon und Borsippa nach den Ausgrabungen durch die Deutsche Orient-Gesellschaft, Ausgrabungen der Deutschen Orient-Gesellschaft in Babylon* 1; *Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft* 15, Leipzig, 1911, p. 44, Abb. 63 (for a spiral 'trunk' topped by a rosette symbol); R. Opificius, *Das altbabylonische Terrakottarelief, Untersuchungen zur Assyriologie und vorderasiatischen Archäologie* 2, Berlin, 1961, no. 420 (for a spiral 'trunk' topped by a sun disk within a moon disk), and no. 681 (for a spiral 'trunk' topped with maces and animals' heads). See also Barrelet, 1968, nos. 712–14 (for spiral 'trunks' each topped by a crescent in a disk).

[473] See Loud and Altman, 1938, p. 45, 'We are inclined therefore to believe that each of these shafts was originally topped by some formal standard, religious or otherwise, a simple knob . . . or a disk.' Later see Barrelet, 1968, p. 405, n. 1, where she made the suggestion by comparison with imbricated 'trunks' carrying sun disks (e.g., cat. nos. 815–16).

[474] See R. de Mecquenem, 'Offrandes de fondation du Temple de Chouchinak,' in J. de Morgan, G. Jéquier, R. de Mecquenem, B. Hausoullier, D. L. Graadt van Roggen, *Délégation en Perse, Memoires,* t. 7, *Recherches Archéologiques,* deuxiéme série, Paris, 1905, pp. 61–130.

[475] See de Mecquenem, 1905, p. 68, for a terminus ante quem of the reign of Untash-Napirisha (1340–1300 BC) according to the style of language inscribed onto a piece of gold sheeting; and pp. 123–24, for the conclusion that the techniques and materials used to fashion the objects, as well as their forms, can be dated from the twelfth to the eighth century BC. See P. O. Harper, J. Aruz and F. Tallon, eds., *The Royal City of Susa, Ancient Near Eastern Treasures in the Louvre,* New York, 1992, pp. 155–56, cat. no. 102, for the circumscribed Middle Elamite date.

[476] See de Mecquenem, 1905, pp. 64–65; and Harper et al., 1992, pp. 145–46 (which includes a review of the original excavators' interpretations).

that this leaf recalled those of much larger size recovered from the (larger 'foundation') deposit near the temple of Inshushinak.[477]

De Mecquenem recovered a variety of large bronze leaves, in considerable numbers, from the large 'foundation' deposit on the Acropole. The smallest of these, which may perhaps be a sepal pierced at its end, measures 5 cm long (fig. **80**).[478] If indeed a sepal, it could have enclosed a bloom of some significance. Four other leaves, all of the same variety, were described by de Mecquenem as possibly belonging to an aquatic plant; they range in size from 18 to 24 cm wide, with the longest measuring 28 cm (fig. **81**).[479] Seven more leaves, all of another variety with visible veins, range in size from 9.5 to 12.5 cm wide, with the longest measuring 14 cm (fig. **82**).[480] Three fairly intact branches, with another variety of leaf attached, range in size from 11 to 14 cm wide, with the longest measuring 25 cm (fig. **83**).[481] And approximately twenty spikes representing reeds or palm fronds whose ends were pierced by two holes were recovered, ranging in size from 40 to 50 cm long, and approximately 3 cm wide (fig. **84**).[482] The holes appearing in the branches and leaves in figs. **83–84** reveal their means of attachment. Many bronze nails were also recovered from this same deposit and, additionally, gold, silver and bronze sheeting.[483] Perhaps the leaves and branches were once nailed to a wooden pole—which had been covered in a metal sheath.

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[477] He found this small bronze leaf in a deposit close to a 'column of bricks' inscribed with the names of Elamite kings: see de Morgan et al., ('Trouvaille de la Colonne de Briques') 1905, fig. 77, and p. 51, 'Une feuille. . . rappelant par sa découpure les feuilles, beaucoup plus grandes d'ailleurs, trouvées dans les dépôts de fondation.' De Morgan dated the bronze objects found in this deposit from anywhere between 2000 and 646 BC (see p. 59).

[478] Ibid., p. 77, fig. 167 and pl. XIX, 9. De Mecquenem described it on p. 79, 'Trois feuilles (?) . . . montées sur une même tige, avec des orientations différentes.'

[479] Ibid., p. 78, figs. 176–77. De Mecquenem described them both on p. 79 as 'une feuille de plante aquatique (?). . . .' For fig. 177 (the smaller of our fig. **81**), he wrote, 'une feuille . . . dont le pourtour est largement dentelé; elle présente sept dentelures de 6 à 7 centimètres de longueur: la base de la feuille et la tige manquent.—Largeur, 18 cm.' For fig. 176 (the larger of our fig. **81**), he wrote, 'une feuille analogue à onze dentelures. Sensiblement ronde.—Diamètre 24 cm.' He described two more of the same type (no illustration) as, 'une feuille analogue plus grande, moins bien conservée, il y avait douze dentelures.—Longueur, 28 cm, Largéur, 23 cm'; and 'une feuille analogue, ployée en deux à laquelle il ne reste que deux dents.'

[480] Ibid., p. 79, figs. 178–79. De Mecquenem described them on p. 79 as 'une feuille sensiblement ronde, à nervure centrale et trois nervures secondaires.' For fig. 178 (the larger of our fig. **82**), he wrote, 'longueur 14 cm, largeur 12.5 cm'; and for fig. 179 (the smaller of our fig. **82**), he wrote, 'quatre feuilles de même type, longueur, 11 cm, largeur 9.5 cm.' For the sixth and seventh leaves (no illustration) he wrote, 'une feuille analogue moins complète et plusieurs fragments . . . [and] une feuille du même type, pliée en deux.'

[481] Ibid., pp. 79–80, figs. 180–82. De Mecquenem described them on p. 79 as 'un rameau composé d'une tige plate sur laquelle prennent naissance cinq paires de feuilles opposées, et terminé dans le haut par une feuille; la base de la tige manque.' For fig. 180 (the branch seen farthest left in our fig. **83**), he wrote, 'longueur totale 25 cm, largeur maxima, 14 cm, longueur d'une feuille, 6 mm.' For fig. 181 (the branch seen in the middle of our fig. **83**), he wrote, ' un rameau du même type, mais dont les feuilles sont plutôt dirigées vers le haut et sont alternées—Longueur, 20 cm, Largeur, 11 cm.' For fig. 182 (the branch seen farthest right in our fig. **83**), he wrote, 'un rameau analogue, incomplet, en deux fragments, montrant huit feuilles: la tige est trouée deux fois vers le milieu de sa longueur.' Also, fragments of similar branches were recovered.

[482] Ibid., p. 80, fig. 183. De Mecquenem described them on p. 80 as, 'une vingtaine d'éléments de feuilles de roseaux ou de dattiers, d'une longueur de 40–50 cm, plus ou moins com-

When we compare fig. **84** to fig. **85** (de Mecquenem's reconstruction of a baked clay brick relief of a bull-man and date palm from Susa) and to fig. **86** (the most recent reconstruction of these baked bricks), it appears more likely that, based on formal appearance, the bronze spikes represent palm fronds rather than reeds. This interpretation is further supported by the fact that the molded brick relief of figs. **85–86** was produced in the same milieu as the bronze fronds of fig. **84**. The molded bricks are associated with another temple dedicated to Inshushinak at Susa, dated to the twelfth century BC.[484] If we find this comparison convincing, we can conclude that the style of rendering palm fronds in bronze appears the same as that in baked clay. This then is a helpful point for imagining the construction of artificial trees: renderings in one medium can help us reconstruct renderings in another. In our case, not only can we reconstruct the leaves in fig. **84** as palm fronds based on the style of frond shown in figs. **85–86**, but we can further propose that these metal fronds were then attached to a wooden pole that had been fitted with an imbricated metal sheathing, whose design may have been based on the imbricated palm trunk seen in the molded brick relief in figs. **85–86**.

The molded brick figures in figs. **85–86** were part of an exterior wall relief composition, parts of which were excavated by de Mecquenem from 1913 to 1921.[485] The unglazed bricks, reused in the construction of a later drainpipe and aqueduct, were understood to have been intended for the facade of the Inshushinak temple located on the Apadana mound, a building that de Mecquenem had partially excavated. The greatest number of bricks recovered belong to the bull-man and tree composition, of which six entire panels have now been reconstructed. In his first report on these bricks, de

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plets. La tige large au plus de 3 cm s'affile en pointe, vers le haut, et se termine au bas par un ruban plat percé de deux trous.'

[483] Ibid., p. 85 and figs. 213–80; text description on pp. 83–86 for the nails; and pp. 66–72, passim, for the metal sheeting (not all illustrated). No mention is made of an imbricated (or other) design on the sheet fragments.

[484] Across the surface of the unglazed molded bricks is an inscription naming the twelfth-century BC Elamite king Shilhak-Inshushinak and describing his restoration of the exterior sanctuary of Inshushinak. The bricks composing this relief were presumably intended for the Inshushinak temple located on the Apadana mound at Susa. However, 'as Suzanne Heim notes in her dissertation, there are references to the discovery of baked bricks with inscriptions and molded decoration on the Acropole mound, but whether these bricks belong to this same series is unclear.' For this see Harper et al., 1992, p. 144, n. 1, and S. Heim, 'Glazed Architectural Elements from Elam and Related Material from Luristan,' Ph.D. diss., Institute of Fine Arts, New York University, 1989, pp. 764–75.

[485] For the initial report, see R. de Mecquenem, 'Fouilles de Suse: Campagnes des années 1914, 1921, 1922,' *Revue d'assyriologie et d'archéologie orientale* 19 (1922), pp. 109–40, esp. 128–30.

Mecquenem had reconstructed the figures separately and had isolated the bull-man from the date palm with curious results (fig. **85**). Nevertheless, he had understood from the beginning that the tree represented a date palm because of its characteristic scaly bark—represented here as horizontal bands of alternating inverted triangles—and two bunches of fruit.[486] Fairly soon thereafter, de Mecquenem realized that the bull-man and date palm formed one complete composition (as in fig. **86**), this motif having a number of Mesopotamian parallels.[487] It is thought that the combination of bull-man and palm tree appeared across the facade of the entire temple;[488] and that these figures served to protect the temple and its inhabitants.[489]

The idea of placing artificial trees or treelike poles at temple entrances (such as at the Sîn temple at Khorsabad), or placing artificial trees across the facade of a temple (such as at the Inshushinak temple at Susa), appears to have had a history extending from the third millennium BC in Mesopotamia. Several examples from the third to second millennium serve to illustrate this tradition.

It may be that a relation between temples and trees influenced the decoration of columns reconstructed as standing at the top of the stairway entrance to the Ninhursag temple at Tell al-'Ubaid (an Early Dynastic III site, c. 2600–2300 BC), located about four miles west of Ur. H. R. Hall and Leonard

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[486] Ibid., pp. 129–30, 'Le troisième motif est un palmier, au feuillage raide figuré par les seules nervures des feuilles en éventail; au-dessous de leur naissance pend de chaque côté un fruit arrondi; un bras droit se détache de l'arbre pour venir saisir de la main le tronc de l'arbre qui présente les squamosités classiques du dattier.'

[487] As noted by J. M. Unvala, 'Three Panels from Susa,' *Revue d'assyriologie et d'archéologie orientale* 25 (1928), p. 180. See Unvala's reconstruction that reflected de Mecquenem's later opinion in figs. 2, 6. De Mecquenem changed his mind about the one-armed date palm once he had seen an unprovenanced bronze figurine of a bull-man that replicates the front-facing posture and arm gestures seen on the Susa molded bricks (see ibid., fig. 1). De Mecquenem's change of mind was also influenced by a clay plaque found at the Esagila temple in Babylon on which is represented a bull-man holding on to an imbricated trunk topped by a rosette (ibid., fig. 4). R. Dussaud's entry in *Catalogue de l'Exposition d'Antiquités orientales, Fouilles de Tello, de Suse, et de Syrie, Musée de l'Orangerie des Tuileries, Octobre–Novembre 1930*, Paris, 1930, p. 72, cat. no. 100 and pl. IV, reproduced the later de Mecquenem/Unvala reconstruction of the Susa bricks with a bull-man holding on to a date palm. See Harper et al., 1992, p. 141, where recently restored panels assembled in 1990–91 (upon which our fig. **86** is based) are estimated at 137 cm high and 37 cm wide. Our drawing shows that de Mecquenem's reconstruction was a bit too neat: note how the bull-man's arms do not meet up and how the tip of his left hoof is missing.

[488] Note the inscription running across the molded bricks, which described Shilhak-Inshushinak's reconstruction of the *kumpum kiduia* dedicated to Inshushinak. See Unvala, 1928, p. 181, who interpreted this Elamite phrase as a decoration in bas-relief made of terracotta or composed of baked bricks that covered (part of) a sanctuary and perhaps the wall encircling the sanctuary. See Harper et al., 1992, p. 141 and n. 2, who interpreted the *kumpum kiduia* as the exterior sanctuary.

[489] Consider F. A. M. Wiggermann, 'Babylonian Prophylactic Figures, The Ritual Texts,' Ph.D. diss., Vrije Universiteit, Amsterdam, 1986, p. 275, 'Palm and gypsum (copper and stones) are most easily understood as apotropaic features of the gate building, along with various monsters, animals, and doorkeeper gods.'

Woolley excavated the two types of freestanding decorated columns shown in reconstruction in fig. **87**, one type sheathed in copper and the other type inlaid with tesserae of mother of pearl, red sandstone and/or pink limestone and black bituminous shale.[490] The copper sheathing appears to have been completely smooth, having covered a palm trunk that had disintegrated by the time of excavation. The best preserved example was reconstructed at 3.6 m long, with a diameter between 17 and 20 cm. The design of the tesserae covering the other column, also a palm trunk, resembled palm trunk imbrications very like the alternating triangle design used on the Susa brick relief (figs. **88–89**). The best-preserved example of this type was reconstructed at 3.3 m long, with a diameter of 30 cm.

The tesserae were made of three shapes: small squares set in a diamond fashion in three horizontal bands around the column, with small triangles set at the edges to demarcate the bands, and elongated triangles alternating in color and orientation around the column in between the bands. The mosaic design covering the palm trunk cores appears to reflect the pattern of the bark it covered, with the addition of three bands. Woolley thought that these bands represented the counterpart of actual metal bands that had once adorned actual palm trunks.[491] He also thought that the tesserae mosaic design mimicked actual palm trunks.

> In a land where the palm-tree is indigenous man can hardly avoid the use of the column; that the primitive people of Mesopotamia availed themselves

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[490] Hall's 1919 excavations and Woolley's 1923–24 excavations recovered both types of columns on either side of the ramp leading to the platform of the Ninhursag temple. For a plan of their findspots, see H. R. Hall and C. L. Woolley, *Ur Excavations,* vol. 1, *Al-'Ubaid, A Report on the Work carried out at Al-'Ubaid for the British Museum in 1919 and for the Joint Expedition in 1923–4, Publications of the Joint Expedition of the British Museum and the Museum of the University of Pennsylvania to Mesopotamia,* Oxford, 1927, pl. II. See also p. 17 for Hall's description of both column types, 'There were three pillars of copper with . . . (originally wood) inside them and five of mosaic work with triangular tesserae of red sandstone, black bituminous limestone, and mother-of-pearl arranged in geometric patterns and fastened at the back by means of copper wire through V-shaped perforations into a layer of bitumen which was apparently spread over a wooden core. . . . [Both types of] pillars . . . had preserved only about three feet of their height. . . .' See also p. 40, fig. 3, for Hall's sketch of the mosaic column and his measurements of both types of recovered columns. See pp. 100–103 for Woolley's description of the mosaic columns and pp. 102–3, and fig. 21, for the copper-sheathed columns he had found. Woolley described their recovery on p. 115, 'On both sides of the staircase . . . were found mosaic columns and palm-logs sheathed in copper, these being . . . of different sizes and dimensions. On the west side we found two complete mosaic columns lying one above the other parallel to the platform front and 3.00 m from it, and with them two more broken copper-sheathed logs again almost parallel to the wall. . . . To lie as they did, the columns must either have fallen from the edge of the platform immediately above, or have been standing upright on the top of the ramp and from there come to the ground. . . . Either, therefore, there was a colonnade along the front of the temple, or there were columns at the door of it.'

[491] This possibility, that the tesserae bands represent metal versions placed on actual tree trunks, was first put forward by Woolley, op. cit., p. 100 (in reference to pl. XXXV, 7=our fig. **89**).

> of so obvious a convenience would have been a reasonable assumption were there no evidence to support it, but the evidence is not lacking . . . that the triangular tesserae of the mosaic columns from the al-'Ubaid temple of the First Dynasty of Ur, c. 3000 B.C., have the same motive is not to be doubted—they are actually applied to palm-log uprights—and when we know that built columns were used at the beginning of the Uruk period we can be certain that the simple form at least was familiar to the architects of al-'Ubaid I.[492]

However, the idea of decorating columns with a design of palm imbrications had been devised even earlier at Uruk.

In the Eanna precinct at Uruk (dated to the Jemdet Nasr period, c. 3200–2900 BC) stood a ziggurat dedicated to Inana that was surrounded by a broad area of courtyards and terraces. Within this layout was situated the 'Pillar Hall,' an enormous portico measuring 30 m wide, which was presumably a monumental approach to some building beyond (figs. **90–91**). The 'Pillar Hall' has been reconstructed as comprised of a double row of freestanding columns 2 m in diameter, with engaged half-columns at either end. The approach to the portico was made via a terraced courtyard, whose walls were faced with engaged half-columns. Connecting the portico and courtyard were three separate sets of stairways. The entire surface of the freestanding and engaged columns, as well as the courtyard walls, was decorated with a mosaic of multicolored terracotta cones. The remains of these decorated columns and walls were first noted by the archaeologist William Loftus in the mid-nineteenth century and later excavated, documented and reconstructed by archaeologists Arnold Noldeke and Ernst Heinrich.[493]

The cone-mosaic decoration at Uruk was achieved by dipping the flat ends of cones in yellow, black or red pigments and inserting the pointed ends into the freestanding and engaged columns, as well as the walls (fig. **92**). The designs created include various lozenge, horizontal and vertical 'zig-zag,' and alternating inverted triangle patterns (see figs. **90–91**). The alternating inverted triangle design seen on these columns reminded Hall of his tesserae mosaic columns at al-'Ubaid.[494] We see that this particular design occurred on the engaged columns within the courtyard, on those situated on the stairway leading up to 'Pillar Hall,' as well as on the freestanding columns within the hall. A comparison with figs. **88–89** suggests that imbricated tree trunks, which appear to have inspired the design of the al-'Ubaid mosaic columns, may also have inspired the design adorning the columns in the hall proper and some of the columns in the courtyard at Uruk. The imbricated design at Uruk is more intricate and abstract than that seen at al-'Ubaid. On one example from the stairway (fig. **93**), we see small sets of differently colored inverted triangles that cover the surface, denoting the individual scales of palm bark. We also see that the overall design resembles large horizontal bands of zigzags moving around the column. This rather abstract manner of depicting palm imbrications is evidenced in other media, for example on an Akkadian seal (fig. **94**). The contours of the imbrications, carved in deep grooves on the cylinder, zigzag across the surface of the trunk in a manner similar to those seen on the cone-mosaic columns.

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[492] Woolley, *Development of Sumerian Art,* London, 1935, p. 41. In this context one might also consider the same triangular tesserae decoration adorning other objects, e.g., a 'scepter.' For this see Woolley, *Ur Excavations,* vol. 2, *The Royal Cemetery, A Report on the Predynastic and Sargonid Graves Excavated between 1926 and 1931, Publications of the Joint Expedition of the British Museum and the Museum of the University of Pennsylvania to Mesopotamia,* Carnegie Corporation, NY, 1934, p. 113, and pl. 153 (U. 12442, PG/1236). The same tesserae decoration also adorned a cylindrical object of unknown function, now in the Louvre: see G. Jéquier, J. de Morgan, J. E. Gautier, G. Lampre, A. Jouannin, A. de la Fuye and H. de Morgan, *Mémoires,* t. 8, *Recherches Archéologiques,* troisième série, *Délégation en Perse,* Paris, 1905, p. 79, fig. 106 (Sb 2855–56).

[493] Initially, see W. K. Loftus, *Travels and Researches in Chaldæa and Susiana, with an account of excavations at Warka, the 'Erech' of Nimrod, and Shúsh, 'Shushan the Palace' of Esther, in 1849–52,* London, 1857, pp. 187–90. For the excavation and reconstruction of these colored cone columns and walls, particularly in the 'Pillar Hall,' see A. Nöldeke, E. Heinrich, H. Lenzen and A. von Haller, *Vierter vorläufiger Bericht über die von der Notgemeinschaft der Deutschen Wissenschaft in Uruk unternommenen Ausgrabungen von Dr. Arnold Nöldeke und E. Heinrich, H. Lenzen, A. v. Haller, Aus den Abhandlungen der Preussischen Akademie der Wissenschaften Jahrgang 1932, Philologisch-Historischen Klasse,* Nr. 6, Berlin, 1932, pp. 13–19, Taf. 4, 7–10.

Where Hall saw a likeness between the al-'Ubaid mosaic columns and the Uruk mosaic columns, Woolley saw a likeness between the al-'Ubaid mosaic columns and mudbrick columns he had found at Ur.[495] There, as part of a fortified entrance to the Ekišnugal (Sîn's sanctuary) excavated by Woolley, stood two mudbrick columns fashioned as palm trunks. The entrance pierced the middle of a retaining mudbrick wall that extended along the northwest side of the ziggurat (fig. **95**). This entrance and the wall's facade were built during the Old Babylonian period, probably during the reign of the Larsa king Warad-Sîn (1834–1823 BC). The wall's facade was made up of a series of engaged columns and niches, which Woolley thought imitated timber construction (fig. **96**).[496] This idea, that the engaged mudbrick columns covering the facade of the retaining wall were meant as imitations of palm logs, is noteworthy particularly as we see explicit references to palm trees in the middle of the facade, that is, at its entrance (fig. **97**).

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[494] Hall and Woolley, 1927, p. 49, n. 4, 'The triangular pattern [on the courtyard columns at Uruk, as illustrated in Loftus, 1857, p. 188] reminds us of the stone triangles of the mosaic pillars [at al-'Ubaid]. . . .'

[495] Woolley, 1935, p. 41, '. . . in a building of the Larsa period [i.e., the terrace wall of the ziggurat at Ur, dated to the reign of Warad-Sin, a king of the Larsa dynasty], we find an interesting survival [of the palm] in the shape of a column of mudbrick, of which the surface is moulded in relief with triangles reproducing faithfully the texture of the palm-trunk; that the triangular tesserae of the mosaic columns from the al-'Ubaid temple . . . have the same motive is not to be doubted. . . .' Further, see p. 105, and pl. 57b.

[496] Excavations of the ziggurat at Ur took place from 1923 to 1934: see Woolley, *Ur Excavations*, vol. 5, *The Ziggurat and Its Surroundings, Publications of the Joint Expedition of the British Museum and of the University Museum, University of Pennsylvania, Philadelphia, to Mesopotamia*, New York, 1939, p. 42, 'On a heavy foundation . . . rises a wall entirely made up of large attached half-columns with double recessed niches down their centres. . . . It is obvious that we have here a translation into brickwork of an effect originally produced

Woolley described this entrance structure as a 'bastion . . . a solid mass of mud brickwork rising from the lower terrace enclosed by the temenos wall and . . . pierced by a staircase giving access from that lower level to the ziggurat platform.'[497] The entrance was demarcated by a recess and two mudbrick columns built in the round and decorated to resemble palm trunks (fig. **98**).[498] The design of the imbrications, achieved by molding raised triangles on horizontal segments of clay bricks, closely matches the design seen at Susa, on fig. **86**. The tree-trunk-decorated columns at Ur, standing at the stairway entrance leading to the ziggurat of Sîn, also suggest a parallel with the mosaic tesserae columns associated with the entrance to the Ninhursag temple at al-'Ubaid (fig. **87**).

At Tell al-Rimah and Tell Leilan in northern Mesopotamia we have fine examples of engaged mudbrick columns sculpted to resemble the trunks of date palms.[499] At both sites these columns adorn the facades of contemporaneous early second-millennium BC temples; and their decoration recalls the engaged mudbrick column design at Ur. The range of engaged column designs that cover the facades of the two temples at Tell Leilan is varied:

> (i) a palm trunk column, with diamond-shaped frond scars, surrounded by braided columns; (ii) a palm trunk column with petal-like imbricated fronds; (iii) columns of mudbrick spirals twisting in alternate directions; and (iv) plain-faced columns either twisted or straight.[500]

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by timber construction; the curved uprights are palm (?) logs, the niches are composed of squared baulks very probably laced one to another by thongs passed through holes in angles. . . . The decorated facade rose either directly from ground-level or from a low base . . . ; it is impossible to say whether it was carried up to the full height of the tower, but the great width of the individual [engaged] columns does imply a considerable height, and its effect over a large surface would have been very striking.'

[497] Ibid.

[498] Ibid., 'The columns were built of specially moulded bricks, segmental in shape and with the outer edge not only rounded to the curve of the column shaft, but with a further boss in relief so that each set of three bricks . . . produced a truncated triangle standing out from the column in low relief; these triangles, . . . set in rows one above another, made of the brick shaft a very close imitation of a date-palm trunk, the original from which in Mesopotamia the architectural column was inevitably derived. . . . [T]heir diameter [was] 70 cm.'

[499] Tell Leilan is located in the modern state of Syria, and Tell al-Rimah is in Iraq.

[500] H. Weiss, 'Tell Leilan on the Habur Plains of Syria,' *Biblical Archaeologist* 48 (1985), p. 10. See pp. 8, 10–11, 13 for the different column designs. And see Weiss, 'Tell Leilan and Shubat Enlil,' in H. Weiss, ed., *Ebla to Damascus, Art and Archaeology of Ancient Syria, An Exhibition from the Directorate-General of Antiquities and Museums of the Syrian Arab Republic*, Washington, DC, 1985, pp. 211–12, for a comparison between the Tell Leilan and Tell al-Rimah column decoration. (The form of spiral columns at Tell Leilan and Tell

The courtyard and temple building at Tell al-Rimah were decorated with fifty engaged columns carved like those at Tell Leilan, that is, in a spiral form and two types of palm trunk (a 'scale' pattern and diamond-shaped pattern); and these stood either singly or in panels of four. Their large size and girth (60 cm in diameter) suggest a parallel with actual adult palm trees.[501] Harvey Weiss noted that the architecture at Mari in ancient Syria, a site contemporary with Tell Leilan and Tell al-Rimah, and home of the palace of the king Zimri-Lim (c. 1775–1761 BC),

> provides the most contexts for palm-tree decoration within public buildings: three for palaces and one for a temple. A much discussed chamber within the Palace of Zimri-Lim . . . was known as the 'Date Palm Court,' while the famous 'Investiture' wall paintings of the palace depict palm trees with trunks trimmed in the 'diamond' fashion, like the mudbrick columns of Leilan, and the Bastion of Warad-Sin at Ur. Less well known, but very intriguing, is the reference to a 'Palm Tree' Palace [possibly constructed later at Mari]. . . . A stone-column base from Mari cut in imitation of palm scales suggests that columns resembling palm-tree trunks would have been quite at home here. And lastly, it did not escape the notice of André Parrot that the left side of the doorway into the Dagan Temple at Mari 'semble avoir été decoré de troncs de palmier.'[502]

It is not yet clear whether the date palm court at Mari, known from texts, was populated with living or artificial date palms. Certainly the technical knowledge for fashioning life-sized date palms in mudbrick was well known at this time, as evidenced by the column designs at Tell Leilan and Tell al-Rimah.[503]

This initial inventory of artificial tree parts gives some evidence of the sorts of materials used for producing artificial trunks, bark and leaves; it also gives some evidence of the range of artificial tree designs, for instance

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al-Rimah closely resembles the spiral-like 'trunks' carrying symbols discussed earlier in this chapter.)

[501] D. Oates, 'Tell al Rimah,' in J. Curtis, ed., *The Work of the British School of Archaeology in Iraq 1932–1982,* London, 1982, p. 95. For the different column designs, see Oates, 'Innovations in Mud-brick: Decorative and Structural Techniques in Ancient Mesopotamia,' *World Archaeology* 21 (1990), pp. 393–94 (pls. 1–2). See S. Dalley, who has identified the spiral form as the *alamittu*-palm, in 'More about the Hanging Gardens,' in L. al-Gailani Werr, J. Curtis, H. Martin, A. McMahon, J. Oates and J. Reade, eds., *Of Pots and Plans, Papers on the Archaeology and History of Mesopotamia and Syria presented to David Oates in Honour of his Seventy-fifth Birthday,* London, 2002, p. 71.

[502] Weiss, 1985, pp. 10–11. For these ideas, see previously T. Howard-Carter, 'An interpretation of the sculptural decoration of the second millennium temple at Tell al-Rimah,' *Iraq* 45 (1983), p. 65.

[503] For the extent of this technical knowledge, see Oates, 1990, pp. 388–406. See Y. Al-Khalesi, *The Court of the Palms, A Functional Interpretation of the Mari Palace*, Malibu, 1978, pp. 10–11 (and reconstruction pl. VI), who argued that the reference to the 'Court of Palms' referred to the Inner Court that was decorated with wall paintings of date palms (which included the 'Investiture Scene'; see our fig. 107) and not with artificial or living trees.

in the round, in relief, or as engaged columns.[504] The purpose here has been to establish that there is a precedent for thinking about the AST as a constructed unit, whose own manufacture could have developed out of techniques and patterns of fashioning tree parts that had been known and used over time.[505] All of the artificial trees, tree parts and treelike columns surveyed above were placed in, around and near temples, and this connection between artificial trees and cult is a useful one to keep in mind as we evaluate the validity of the cult object theory.

At present, we do not have enough archaeological evidence to reconstruct an entire artificial tree (composed of, e.g., crown, trunk, leaves). However, evidence of entire trees fashioned in metal appears in published texts, and these texts may describe the types of artificial trees known partially from the excavations at Khorsabad and Susa.

A 30-cm-high, four-sided prism lists the kings of Larsa over the space of its four sides (from Naplanum, 2025 BC to Samsu-iluna, 1749 BC). On the first side, the king list ends with Gungunum, who reigned over Larsa c. 1932–1906 BC, approximately a century before Warad-Sîn, the king who had added the palm-inspired retaining wall and entrance to the Ekišnugal at Ur (see figs. **95–98**). During Gungunum's reign, the prism records that he presented two bronze palm trees as an offering to the temple of Šamaš.[506] Gungunum's offering of bronze trees to the temple of Šamaš recalls the Susa deposit of bronze branches and leaves (figs. **81–84**) and the shared associations there among royalty, temple offerings and artificial trees.

Seven gilded palm trees standing twelve feet high were drawn on carts in a civic parade that took place in Alexandria during the reign of Ptolemy II

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[504] We have focussed here on large-scale examples, but there are examples of trees sculpted in the round on a smaller scale. E.g., see Howard-Carter, 1983, p. 65 and pl. IIb, for a small terracotta sculpture of four adjoining date palm trunks that, like the columns, lack palm fronds (approx. ht. 20–25 cm). This sculpture is in the Louvre (AO 17277). Howard-Carter referred to this sculpture as a 'model, possibly an architect's sample.'

[505] This perspective offers a different interpretation of the same kind of evidence used by date palm theorists who see the fashioning of artificial trees as proof of a date palm identification of the AST; e.g., see Mallowan, 1983, p. 38, 'The facade of the temple at Tell Rimah, dating to about the time of King Shamshi-Adad I [1813–1781 BC], was decorated with engaged columns of molded mud brick representing palm trunks. Tiglath-pileser I [1114–1076 BC], in completing his father's palace at Aššur, faced the towers with glazed bricks depicting palm trees. It seems likely, therefore, that Tukulti-Ninurta's [I: 1244–1208 BC] artists, who designed the frescoes on the walls of the new palace at Kar-Tukulti-Ninurta and created the intricate banded palmettes of the "sacred tree" [see our fig. **18**], derived their inspiration from the date palm.'

[506] This prism was acquired by the Louvre (AO 7025). See F. Thureau-Dangin, 'La chronologie de la dynastie de Larsa,' *Revue d'assyriologie et d'archéologie orientale* 15 (1918), pp. 4, 10, for the transcription and translation of side 1, line 6. See p. 16 for Thureau-Dangin's note on line 6 and his translation of it. The text does not record the size of the palms. No other similar objects were mentioned on the prism. Barrelet discussed this text as evidence for the production of artificial trees ('arbres fictifs') in Barrelet, 1950, p. 26 and n. 59. Previously see van Buren, 1945, pp. 24, 28–29, for reference to Gungunum's trees.

Philadelphus (c. 284–246 BC).[507] The author recording the event described the gilded palm trees as appearing together with cult objects and ritual objects—that is, empty chryselephantine thrones, *thymiateria*, altars, *escharai* and enormous gold Delphic tripods.[508] Because the palms appeared together with these objects, scholars have thought that the palms must also represent a category of objects sacred to a god and were likely offered to that god following the parade.[509] Perhaps this Hellenistic text provides a parallel for Gungunum's trees: did Gungunum's bronze palm trees, like those of Ptolemy II Philadelphus, represent the symbol of a god presented in a temple belonging to the same or another god?[510]

The Old Babylonian and Hellenistic texts show that artificial trees could be regarded as sacred objects. Both texts also indicate the sheer economic value of such trees, as offerings worthy of monarchs. A passage from Herodotus expands on this last idea.

> In this city a certain Lydian, Pythius, son of Atys, was waiting for the king. He entertained the whole army and Xerxes himself with splendid hospitality, and said he would like to give money in furtherance of the war. When he made this offer, Xerxes asked the Persians about him who this Pythius was, and how much money he had to make him so generous. They told him: 'King, this is the man who made your father, Darius, a gift of a golden plane-tree and a vine; and he is of all men that we know the richest, excepting yourself.'[511]

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[507] The event was originally described in detail and recorded by Kallixeinos of Rhodes (c. 221 BC). For a translation of and commentary on Kallixeinos' text, see E. E. Rice, *The Grand Procession of Ptolemy Philadelphus*, Oxford, 1983, esp. pp. 22–23, lines 241–42 (section 202C), for the description of the artificial palm trees. In his commentary on this section (p. 120), Rice noted, 'The size of all these objects suggests they were drawn on carts like the ritual objects of Dionysus [listed in the previous section] 201E. . . . Kallixeinos mentions that these figures are gilded, επιχρνδοι, probably bronze, wood, or terracotta covered in gold.'

[508] Rice, 1983, p. 117.

[509] Ibid., p. 119, 'In view of the fact that the following section of the text describes a parade of ritual objects sacred to various gods, these tripods may be the first in the series, and in honour of Apollo (to whom above all other gods the tripod was sacred because of its important role in Apolline mantic cult), especially since the palm tree[s] which immediately follow the tripods also ha[ve] Apolline connotations.' And pp. 119–20, 'The palm trees may perhaps be symbols of Apollo, Apollo and Artemis, or Leto because of their associations with the divine births at Delos. . . .' See p. 35 for the idea that at the end of the parade the cultic and ritual objects were offered to the god(s) in his (their) temple.

[510] For some ideas concerning the identification of Gungunum's palms, consider G. Selz, '"The Holy Drum, the Spear, and the Harp," Towards an Understanding of the Problems of Deification in Third Millennium Mesopotamia,' in I. Finkel and M. Geller, eds., *Sumerian Gods and Their Representations, Cuneiform Monographs* 7, Groningen, 1997, pp. 173–74 and nn. 144, 167–71, who discussed Old Sumerian Lagaš administrative documents that refer to a cult object as 'the Bronze Date-palm,' which received offerings or votive donations in temples. Selz thought that the 'Bronze Date-palm' emblem must be connected with the slain heroes and slain gods 'well-known from the later Nin-ğirsu/Nin-urta traditions.'

[511] Herodotus, *Histories*, 7.27.

If Herodotus is right, then Darius I received a gold plane tree sometime during his reign (522–486 BC). It is interesting to consider this event in light of the Susa deposit made 600 years earlier. Did the kings of this region have a preference for trees made of precious metals? Did ancient Near Eastern kings offer artificial trees to gods?

The evidence necessary to answer these kinds of questions still needs to be amassed: this has been my purpose in starting an inventory of the published archaeological and textual remains relevant to the production of artificial trees. Our search for such published evidence has of necessity been quite broad—hence the inclusion here of texts and material remains dated well before and after the Neo-Assyrian period. Our last textual example also falls immediately outside the chronological range of the AST, but because it dates to the reign of Tukulti-Ninurta I, it is the most chronologically relevant of all the texts in our survey.

The text, VAT 16462, was found at Tukulti-Ninurta I's palace at Kar-Tukulti-Ninurta (1244–1208 BC). This site is mainly known for the frescoes found on the walls at the palace there, which have often been cited as the earliest example of the AST (fig. **18**). VAT 16462 is an inventory text of the palace treasure and, among other items, describes the decoration of a throne adorned with a pomegranate tree, treetops and foliage separated by *riksu* or *riksānu*, translated as 'bands,' of artificial lapis lazuli.[512] Another object in the inventory is described as decorated with gold rosettes for the trunk as well as for the *riksu*s, fruit and buds; and another object is described as decorated with fruit, buds or shoots and palm hearts also separated by *riksu*.[513] *Riksu* was used in other contexts to refer to furniture and building construction, and examples describe people creating, securing or reinforcing *riksu*s, translated variously as 'band,' 'strap' or 'joint.'[514]

Based on this text, it is thought that *riksu* refers to the bands linking the palmettes of the different 'tree' types depicted in fresco on the walls of Tukulti-Ninurta I's palace (see fig. **18**).[515] If this is correct, we then have a word that refers to one component of the earliest form of the AST. It should be emphasized in this context that *riksu* does not mean 'branch' or any other part of a tree. It is a term used to describe a piece that is attached to another constructed object. Terms of this sort provide the kind of evidence necessary for demonstrating that the AST is a constructed object. Further investigation into terms that pertain to furniture decoration/construction could yield more possibilities for the cult object theory.

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[512] See F. Köcher, 'Ein Inventartext aus Kār-Tukulti-Ninurta,' *Archiv für Orientforschung* 18 (1957–58), p. 305.

[513] Ibid., pp. 302, 303.

[514] See the entry for '*riksu*' in Reiner et al., eds., 1999, pp. 347–48, 351.

[515] Köcher, 1957–58, p. 308 first suggested this. See Mallowan, 1983, p. 38 and n. 32, who noted Köcher's suggestion. Compare the reconstruction of an Urartian throne in Seidl, 1996, p. 186, fig. 7, which shows a throne decorated with an AST whose design resembles that of the Kar-Tukulti-Ninurta fresco 'trees.'

18 Artifice and the AST

In particular, VAT 16462 and the Khorsabad/Susa material provide reason for considering the constructed cult object explanation for the AST. According to a cult object explanation, the AST would have been made of separate parts like those produced for an artificial tree, such as wood encased by metal, leaves and the connecting elements (i.e., 'bands'), perhaps also made of metal. Like the excavated remains of artificial trees already known to us, we would expect to find isolated pieces that once belonged to an AST instead of an intact 'tree.' The 'binding' element, which Riegl initially observed on the AST as corresponding to a bronze object found at Nimrud (fig. **67**), is one such example of an isolated piece. Fig. **67** once fitted around another object now lost to us.

For the time being, we are confined to published objects to make a case for the cult object theory. In addition to the AST-type seen in figs. **1–2,** there are many other acknowledged types of 'the AST.' Material remains compare favorably with three such AST-types known from cylinder seals and reliefs, and described as the 'rosette-type tree' (or sun-type tree), the 'palmette-type tree' (figs. **1–2**) and the 'Assurnasirpal-type tree' (or pomegranate-type tree).[516]

In figs. **99–102** we have examples of the rosette or sun-type AST.[517]

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[516] See Collon, 2001, pp. 83–84, for the descriptions 'Ashurnasirpal-type tree,' 'palmette-type tree,' and 'rosette-type tree.'

[517] Experts agree that these examples are likely Neo-Babylonian in design and execution: see Frankfort, 1939 (1965), p. 217 and pl. XXXVIe; and B. Wittmann, 'Babylonische Rollsiegel des 11.-7. Jahrhunderts v. Chr.,' *Baghdader Mitteilungen* 23 (1992), pp. 210–11, 263 and Taf. 25, Nr. 67 (for our fig. **99**). (But see H. H. von der Osten, *Ancient Oriental Seals in the Collection of Mrs. Agnes Brett, Oriental Institute Publications* 37, Chicago, 1936, p. 19 and pl. XI, fig. 129, who described the seal as 'Assyrian.') Note that M.-L. and H. Erlenmeyer, 'Von der Bedeutung der Religionsgeschichte für die ästhetischen Probleme der Bildkunst, II,' *Orientalia* 31 (1962), Taf. LIV, Abb. 81 (for our fig. **100**) described the seal as 'eine assyrische Arbeit' (see p. 297). See Wittmann, 1992, pp. 216–17, 270 and Taf. 31, Nr. 118; and U. Moortgat-Correns, 'Altorientalische Rollsiegel in der Staatlichen Munzsammlung München,' *Münchener Jahrbuch der bildenden Kunst* 6 (1955), pp. 23–24, Taf. IV, Nr. 38 (for our fig. **101**). And see P. Amiet, 'La glyptique de la fin de l'Élam,' *Arts Asiatiques* 28 (1973), pp. 8–9, pl. II, fig. 6; and L. Delaporte, *Catalogue des cylindres, cachets et pierres gravées de style oriental,* t. 1, *Fouilles et Missions, Musée du Louvre,* Paris, 1920, pp. 65–66 ('S. 566') and pl. 48, fig. 18 (for our fig. **102**). Also see Collon, 2001, pp. 84, 100, for discussion concerning the Babylonian nature of our figs. **99–102**. (Collon compared ANE 89307=pl. XIV, fig. 179, with our figs. **99–102,** as an example of the 'rosette' type AST.) For another good example of this 'rosette' type AST, see H. Hammade, *Cylinder Seals from the Collections of the Aleppo Museum, Syrian Arab Republic*, vol. 1, *Seals of Unknown Provenance, British Archaeological Reports International Series* 335, rev. Louise Hitchcock, Oxford, 1987, p. 148, cat. no. 286 ('Neo-Assyrian or Neo-Babylonian').

These examples feature a pole with three or four evenly spaced horizontal bands attached; the topmost band lies just under the rosette or sun image. Up to six main 'branches' are evenly distributed, three to a side, seeming to emerge from the lower bands. The 'branches' end in single budlike forms. The rosette or sun image set atop the pole is composed of a large dot surrounded by two concentric circles with rows of smaller dots inside them, and the entire circular configuration is surrounded by 'buds.'

We appear to have the remains of a version of this rosette or sun-type AST in fig. **103**. Andrae, who excavated the piece at Aššur, was the first to wonder whether it had once been attached to the top of a standard.

> Zunächst treffen wir wieder auf gut erhaltene Privathausgrundrisse, die dicht unter der Hügeloberfläche liegen. Darin wurde ein schönes getriebenes, über einen Holzkern genageltes Kupferornament, vielleicht ein Standartenende (?), (Nr. 10400) gefunden.[518]

We can see from the side view of the drawing that, due to the flatness of the piece, it was probably meant to be viewed from the front and that the bronze decoration was once fitted around a core, in this case wooden. Fig. **103** shares several features with figs. **99–102**, in particular the dot in the center with concentric circles surrounding it and one of the concentric circles filled with a row of smaller dots. Also, budlike forms surround the entire circular form, although in fig. **103** these are interrupted by two sets of thin horizontal bands—apparently attachment points—positioned at what has been reconstructed as the top and bottom. However, taking this difference into account, Andrae and Danthine found the similarities close enough to draw their own comparisons among figs. **99, 102** and **103** and to describe them all as ASTs.

Andrae compared fig. **99** with fig. **103**, as did Danthine, who also compared fig. **102**.[519] Both scholars designated all the forms as ASTs, which they in turn interpreted as actual trees: to Andrae, figs. **99** and **103** represented a generic (unidentified) sacred tree or 'tree of life'; and to Danthine, figs. **99, 102** and **103** represented variations of the date palm.[520]

Andrae reconstructed fig. **103** as the bronze top of a standard, which had originally encased a wooden disk. All this was originally attached to a shaft of wood, itself encased by three sets of superimposed metal volutes, two of which were almost completely preserved.

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[518] W. Andrae, 'Aus den Berichten W. Andraes aus Assur von März bis September 1906,' *Mitteilungen der Deutschen Orient-Gesellschaft* 32 (1906), p. 21 (p. 22, Abb. 3, for a photograph of the piece). Puchstein offered a more detailed description of the piece in Puchstein, 1907, p. 5, and Abb. 1. Following Puchstein, see von Luschan, 1912, pp. 24–25, and Abb. 22. The piece measures over 20 cm in length.

[519] See Andrae, 1933, p. 19, Abb. 33 (=our fig. **99**) and 13, Abb. 34 (=our fig. **103**); see also p. 20, where Andrae noted that the design of fig. **103** was comparable to the designs seen on 'cylinder seals.' Also see Danthine, 1937, pl. 75, fig. 502 (=our fig. **99**), pl. 74, fig. 499 (=our fig. **102**) and pl. 74, fig. 501 (=our fig. **103**). Danthine also presented seven other cylinders for comparison with our fig. **103**, i.e., pl. 74, figs. 497–98, 500, and pl. 75, figs. 503–6.

[520] See Andrae, 1933, p. 18; and Danthine, 1937, pp. 50–51.

> Wie das Steatit-Symbol 'auf Reisen gehen' konnte, wird also auch dieses Sternrosettensymbol 'transportabel.' Mann kann darin eine Parallele sehen zu den transportablen Götterbildern. Als Standarte am Streitwagen ging es wohl nur deswegen mit, weil ihm Kräfte innewohnten, die dem Besitzer heilig und wertvoll waren. Erhalten sind Beschlagteile aus dünnem Bronzeblech, die man sich so geordnet denken kann, wie [fig. 103] es zeigen. An einen Holzschaft, der sich oben flach verbreiterte, war eine kreisrunde Holzscheibe angesetzt, über die hinaus sich der Schaft fortsetzte. Auf dem flach verbreiterten Schaftende saßen drei Volutenpaare übereinander, von denen das mittlere und das obere nahezu vollständig erhalten sind.[521]

Andrae observed that fig. 103 must have been mobile: in identifying it as a standard, he compared it to portable three-dimensional symbols and human images of gods. In making these observations, Andrae was noting two characteristic features of cult objects: their mobility and their sacredness.

An interpretation of fig. 103 as a standard top is plausible, yet it is challenged by the two attachment points at the 'top' and 'bottom' of the rosette image. We can see how a wooden shaft, partially encased by bronze superimposed volutes, could have been fitted to the bottom attachment point. But what could have been attached to the top? Andrae's drawing in fig. 103 shows that he considered this point and reconstructed another wooden shaft as emerging from the top. However, Andrae did not comment on this part of his reconstruction. Fig. 104 provides a possible solution to the problem of the topmost attachment point. Here an AST-type, described as the palmette tree (compare figs. 1–2), supports a metal sheet mirror. Made of enamel inlay and gold, and measuring approximately 20 cm, this palmette tree-handle was fashioned in the round, though the palmette head (like the rosette head of fig. 103) is quite flat.[522] We can see two horizontal bands just above and one just below the palmette: above the two bands is the attachment point for the mirror and below the one band is the attachment point for the shaft or 'trunk.' We could reconstruct fig. 103 accordingly, having three pairs of superimposed volutes at the top attachment point that supported another object, such as a mirror. The fact that fig. **104** was found in one of the queens' graves at Nimrud, along with numerous gold vessels and jewelry, speaks to its preciousness, as an object of economic and aesthetic value and as one deemed appropriate for rituals associated with royal burials.[523]

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[521] Andrae, 1933, pp. 18–20.

[522] The palmette head is two-sided, whereas the handle is three-dimensional. The entire ensemble measures approximately 30 cm (pers. comm. D. G. Youkana). See M. S. Damerji, 'The Second Treasure of Nimrud,' in M. Mori, H. Ogawa, M. Yoshikawa, eds., *Near Eastern Studies dedicated to H. I. H. Prince Takahito Mikasa on the Occasion of his Seventy-fifth Birthday, Bulletin of the Middle Eastern Culture Center in Japan*, vol. 5, Wiesbaden, 1991, p. 15, fig. 6. See also Damerji, *Gräber assyrischer Königinnen aus Nimrud (Qubur al-malikat al-Athuriyat fi Nimrud), Sonderdruck aus Jahrbuch des Römisch-Germanischen Zentralmuseums* 45, *1998*, Mainz, 1999, Abb. 21.

On the other hand, Andrae's reconstruction of fig. **103** as a standard top finds support via comparison with an existing image of a Neo-Assyrian standard. The Khinnis/Bavian rock relief seen in fig. **105** features a female deity holding a standard topped by an AST.

F. C. Cooper's archaeological illustration of this rock relief painted in 1850 shows a treelike symbol composed of a palmette with 'branches' radiating outwards and ending in indistinct nodules.[524] The archaeologist Walter Bachmann's detailed drawing published in 1927 reveals that the radiating 'branches' actually end in pomegranates.[525]

Although this pomegranate feature is a distinctive one for ASTs, I know of no exact parallel from either extant cylinders or reliefs. Rather, the Khinnis/Bavian AST is related to other AST-types seen in figs. **106**, **13** and **15**: the palmette-type tree and the pomegranate-type tree (or 'Assurnasirpal-type tree'). Fig. **106** is a detail from one of the genie's costumes carved on the Nimrud palace walls, depicting embroidery decorating the chest area of his garment. On the genie's garment we see an AST composed of a palmette head with 'branches' radiating outwards and ending in cones (compare fig. **13** with the same palmette-type tree). If we combine this palmette head and radiating 'branches' design seen on figs. **13** and **106** with the radiating 'branches' terminating in pomegranates seen on the cylinder in fig. **15**, we have a design approaching that of the Khinnis/Bavian AST.

The Khinnis/Bavian AST that appears at the top of a Neo-Assyrian standard is held by a goddess (probably Aššur's consort Mulissu—since the goddess stands opposite Aššur). The so-called standard top from Aššur (fig. **103**) and palmette-handled mirror from Nimrud (fig. **104**) provide important comparisons for the Khinnis/Bavian AST standard. The floral-like design of both pieces reflects AST representations known mainly from wall reliefs and seals. Their existence bodes well for the suggestion that the Khinnis/Bavian

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[523] This mirror was found in 'grave II' (room 49, below the Northwest Palace at Nimrud), the grave of Atalia, queen of Sargon II (721–705 BC).

[524] See Layard, *The Monuments of Nineveh from Drawings made on the Spot,* Second series, London, 1859, pl. 51. This watercolor was reproduced in Perrot and Chipiez, t. 2, 1884, fig. 310; and A. Paterson, *Assyrian Sculptures: Palace of Sinnacherib*, The Hague, 1917, pl. 104.

[525] See W. Bachmann, *Felsreliefs in Assyrien: Bawian, Maltai und Gundük*, Leipzig, 1927, Taf. 12 (and compare Taf. 10). See also Bachmann's description on pp. 9–10. Most recently, see Magen, 1986, Taf. 10, 5–6, for a reproduction of Cooper's painting and Bachmann's drawing.

AST standard also existed at one time as an actual object, just as we expect, and know, that statues of Mulissu and Aššur exist(ed) as actual objects.[526]

This comparative approach to actual objects and represented objects is not new. Barrelet used it to understand the so-called Investiture Scene painted on a wall of Zimri-Lim's palace at Mari (fig. 107).[527] She interpreted the ritual depicted there as a representation of an actual event that involved Zimri-Lim and actual statues of deities.[528] Further, she interpreted the 'trees' situated closest to this scene as 'arbres fictifs,'[529] drawing comparisons with actual trees connected to temples,[530] with artificial trees and tree parts connected to temples,[531] with trees and standards connected to temples,[532] and with standards connected to temples and cult objects.[533] For Barrelet, the 'arbres fictifs' standing on either side of the 'Investiture Scene' were actual objects, just as we have reason to believe that standards positioned either side of temple entrances depicted on seals were actual objects.[534] Furthermore, Barrelet saw both a formal and functional relation between standards and artificial trees associated with temples.[535]

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[526] The so-called standard top from Aššur (fig. 103) looks quite fragile to me from the photograph: if it is a standard top, perhaps it was held by a representation of a god, like the Khinnis/Bavian AST standard (fig. 105).

[527] Barrelet, 1950, pp. 9–35.

[528] Ibid., pp. 29–30. Previously see van Buren, 1945, p. 128, who also thought some of the figures represented actual statues involved in a ritual.

[529] Previously see Kantor, 1945 (1999), pp. 665–67, who discussed the combination of natural-looking date palms with 'artificial trees' in the Mari fresco.

[530] E.g., trees on the ziggurat terrace of the Ekišnugal at Ur; for this see Barrelet, 1950, p. 23, n. 48.

[531] E.g., Gungunum's bronze palms and Place's reconstruction of bronze and gold palms standing outside the Sîn temple at Khorsabad; for this see Barrelet, 1950, pp. 25–26. Later see York, 1972–75, p. 274, 'The use of trees flanking the [Mari] "investiture" scene has been compared to the use of bronze-trimmed wooden posts of probable cultic significance which flanked the entries of [the the Sîn and Šamaš] temples at Khorsabad in the Late Assyrian period.'

[532] E.g., trees appearing next to standards held by guardians outside temples depicted on cylinder seals; for this see Barrelet, 1950, pp. 26–27.

[533] E.g., standards appearing next to temples depicted on cylinder seals, and maces/standards appearing on either side of a Gudea stele; for this see Barrelet, 1950, pp. 11–13 and 26. W. Stevenson Smith, *Interconnections in the Ancient Near East, A Study of the Relationships between the Arts of Egypt, the Aegean and Western Asia*, New Haven, 1965, p. 99, attributed the specific comparison between the Mari artificial trees and the maces/standards appearing on either side of a Gudea stele to André Parrot, 'The artificial trees flanking the central panel [of the so-called Investiture Scene] provide a new motif which Parrot compares to the two standards on a stela of Gudea from Tello.' For the Gudea stele, see A. Parrot, *Tello, vingt campagnes de fouilles (1877–1933)*, Paris, 1948, p. 178, fig. 36i. On p. 179 Parrot described the standards in question as 'un poteau qui est peut-être la schématisation d'un arbre où cinq disques ou boules, tiendraient lieu de feuilles. . . .' However, this particular comparison between the standards appearing on the Gudea stele and the Mari 'arbres fictifs' originated with Barrelet, not Parrot: see Parrot, *Le Palais, Peintures murales, Mission archéologique de Mari* 2, *Bibliothèque archéologique et historique* 69, Paris, 1958, pp. 62–64, where Parrot attributed all the ideas concerning the Mari 'arbres fictifs' to Barrelet, 1950. Further see p. 59, where Parrot only described the Mari trees as 'arbres stylisés . . . difficile à identifier et ne semble pas être un palmier.' This is the same description he gave in his first publication of the Mari painting in Parrot, 'Les peintures du palais de Mari,' *Syria, Revue d'art oriental et d'archéologie* 18 (1937), p. 342.

Barrelet's approach to understanding the 'artificial trees' in Zimri-Lim's fresco as related to real trees, artificial trees and standards has much to commend it. It seems to me that the AST seen on Aššurnasirpal II's walls could well represent what it seems to represent: a three-dimensional constructed unit, made up of a pole intersected with sets of double-crescent 'binding' elements and topped with a decorative feature, that is, a palmette.[536]

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[534] For a three-dimensional example of a copper and bitumen gatepost symbol found at Tello (dated to the reign of Ur-Nanshe in the mid-third millennium BC and measuring approximately eleven feet long), see R. M. Boehmer, 'Zur Funktion des Steinstifttempels in Uruk nach Befunden der Kampagne 39,' *Baghdader Mitteilungen* 21 (1990), Taf. 6d. Previously see L. Heuzey, 'La construction du roi Our-Nina,' *Revue d'assyriologie et d'archéologie orientale* 4 (1897), p. 112, fig. 19; and Heuzey, 'Le sceau de Goudéa, Nouvelles recherches sur quelques symboles chaldéens,' *Revue d'assyriologie et d'archéologie orientale* 5 (1899), p. 134, fig. H. Heuzey first compared the copper gatepost with gatepost symbols appearing on cylinders in Heuzey, 1899, pp. 132–35, figs. E–G.

[535] See Barrelet, 1950, p. 25, where Barrelet likened the Mari 'arbres fictifs' to standards appearing either side of temple entrances, 'Les arbres stylisés encadrant la scène centrale de la peinture appartiennent à la série des "hampes" qui se dressent de chaque côté de la porte principale du temple mésopotamien. . . .' Also, see p. 26, 'Ces hampes en évoluant au cours des siècles ont fini par donner des *arbres fictifs* puisque devant la façade du temple de Sîn, à Khorsabad [our fig. **73**]. . . .' (emphasis hers). In her comparison between standards and artificial trees, Barrelet (p. 25, n. 57) quoted Dhorme, *Les religions de Babylonie et d'Assyrie, 'MANA' Introduction à l'histoire des religions*, 1, *Les anciennes religions orientales* II, Paris, 1945, p. 196, who had identified the standards appearing either side of temple entrances from texts as *urigallu*, 'De chaque côté de la porte principale se dressent des hampes à anses dont le nom, *urigallu* (du sumérian uri-gal "grande garde") désigne aussi un étendard, un fanion, et même le grand prêtre du temple du temple. Dans une cérémonie nocturne à Uruk les gardiens des portes plantent, à droite et à gauche des portes principales, les *urigallê*, c'est-à-dire les hampes à anses qui interdisent l'entrée et la sortie. . . . Une hampe à anse, en cuivre, longue 3, 27 m, a été retrouvée à Tello [the same copper gatepost symbol described in the preceding note]. . . .' (Also see his remarks on p. 188 concerning guardian figures at temple entrances.)

[536] The idea of a 'palmette standard' is based on analogies with symbols mounted on poles that existed in first-millennium BC Near Eastern contexts. For example, remains of first-millennium BC moon standard symbols, which appear to have been (once) attached to poles, have been discussed by O. Keel, *Goddesses and Trees, New Moon and Yahweh, Ancient Near Eastern Art and the Hebrew Bible, Journal for the Study of the Old Testament Supplement Series* 21, Sheffield, 1998, pp. 68–69, figs. 12–14; and also by U. Seidl, 'Babylonische und assyrische Kultbilder in den Massenmedien des 1. Jahrtausends v. Chr.,' in Uehlinger, ed., 2000, pp. 92–94. Further see van Buren, 1945, p. 67, and also pp. 1–9 and pp. 90–94, for a discussion of symbols either unmounted or mounted on standards.

Conclusion

I would like to reemphasize a distinction that has guided this research, that between 'pre-iconography' and 'iconography.'[537] My principal interest has been in the identity of the object that is represented, or denoted, by the AST. I have argued that it is unlikely to have been a date palm or any other real tree and likely to have been a constructed object. This basic problem has been so difficult to clarify that I have not spent as much time as I might have done on asking what the cult object itself may have signified.

One possibility, of course, is that the constructed object was itself a representation—perhaps of a real tree. We do indeed have evidence from ancient Mesopotamia which suggests that real trees were represented by artificial trees. Some of the best evidence for this comes from research into the *kiškānû*, which we discussed in chapter 1. Whether the *kiškānû* should be identified with the AST or the Biblical tree of life or the Sefirotic tree of medieval Kabbalah may be doubted, but it certainly was a tree of some sort. Various texts, as well as clues from the archaeological record, lead us to suppose that the *kiškānû* was (a) an actual tree connected to temples, (b) an artificial tree connected to temples, (c) part of a sacred grove, and (d) used in a cultic role similar to that of a standard.[538] I would like to end this work with a brief look at the *kiškānû* material, not because it settles the identity of the AST but because it is suggestive and may inspire others to further insights.

One set of texts written in Sumerian describes *kiškānû*s as part of the Ekišnugal, or the moon god's sanctuary at Ur. Woolley excavated the entrance to this temple, fashioned in places as palm trunks and probably built during the reign of the Larsa king Warad-Sîn (see figs. **95–98**). It was from texts written during the succeeding reign of Rīm-Sîn (c. 1822–1763 BC) that we learn how the sanctuary appeared to Sîn's worshippers and the part played by *kiškānû* trees.

It seems that Rīm-Sîn visited the Ekišnugal, and that during his visit he systematically went to the most essential places of the sanctuary: the gate, *apsû* and cella.[539] His first stop at the main gate to the temple complex, situated presumably in the southeast corner of the temenos, brought him into contact with two sets of guardian gods who welcomed him. These gods are described as 'standing,' which conveys the idea of statues guarding the gateway.[540]

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[537] For Panofsky's analyses of these terms, see note 8 above.

[538] In all of this, I am following along ideas developed by Margaret Green, 'Eridu in Sumerian Literature,' Ph.D. diss., University of Chicago, 1975, esp. pp. 185–91. Prior to Green, see Widengren, 1951, pp. 6–9, 19, who regarded the *kiškānû* as a special cult tree (either living or artificial), planted in a grove near Enki's sanctuary. Following upon Widengren's remarks, see York, 1972–75, p. 270.

[539] For the location of the gate, *apsû* and cella, see Woolley, 1939, pp. 32–34. For the textual description of these three places, see D. Charpin, *Le clergé d'Ur au siècle d'Hammurabi (XIX^e–XVII^e siècles av. J.-C.), École Pratique des Hautes Études* 2, *Hautes Études Orientales*

These guardian gods were understood to have then conducted Rīm-Sîn to the next stop, the *apsû*. It seems likely the *apsû* was located on the ziggurat terrace, southeast of the ziggurat proper and near the main gate: Woolley found there a well next to a cistern with four compartments.[541] The translator of these Sumerian texts, Dominique Charpin, identified this well as the *apsû*, a receptacle for holding holy water in the temple courtyard and representing the freshwater ocean lying deep beneath the earth where Enki lived.[542] It is in relation to the gate and the *apsû* that we learn of *kiškānû* trees:

line 1 Rīm-Sîn, roi pourvu de tout ce qui fait un prince,
chef pourvu de qualités innombrables, prééminent en principat,
l'Abzu est la mer sainte, sublime, de l'Ekišnugal,
une immensité vaste en profondeur et en largeur,
fondation des bâtiments intérieurs sacro-saints,
qui embaume la forêt d'essences, de cèdres et de bois-*hašur*.
Il est les fondations du temple, au coeur de temple,
protection pour le temple, aura du temple,
le grand recoin, le recoin sacré, à l'intérieur stable.
Le motif de sa porte,
c'est un lien magique: un disque solaire dont la tête est un
étendard (représentant) un aigle rapace,
saisissant avec force des cerfs tournés vers la droite et vers
la gauche.
Les dieux de sa porte montent la garde;
à cet endroit, tu vois se multiplier d'immenses arbres-*kiškānû*.
Le perron, l'architrave, la barre, le seuil, le . . . ,
le vantail, le verrou, le . . . du temple,
le mur de soutènement de la terrasse du temple, fondation
des bâtiments intérieurs sacro-saints,
ce sont des roseaux très saints, jaunes d'or ou blancs argentés.[543]

22, Genève, 1986, pp. 329–40; and also E. J. Wilson, *'Holiness' and 'Purity' in Mesopotamia, Alter Orient und Altes Testament* 237, Neukirchen-Vluyn, 1994, pp. 6–16 for a discussion of Charpin's interpretations pertaining to these locations.

[540] See C. J. Gadd, 'Rim-Sin Approaches the Grand Entrance,' *Iraq* 20 (1960), pp. 157, 162; and Charpin, 1986, pp. 284–85.

[541] Woolley, 1939, pp. 32–34.

[542] Charpin, 1986, p. 335.

[543] Ibid., 1986, p. 288. This text is referred to as *UET* VI 105 and has a total of 46 lines. For the Sumerian of this passage, see idem, p. 287 (quoted below),
line 1 ^{d}*ri-im*-^{d}EN.ZU lugal me-nun-na

'Magnificent *kiškānû*-trees,' together with guardian gods, decorate the doorway of the *apsû*.[544] The Susa brick relief (fig. **86**) provides one way of visualizing this temple doorway, decorated with guardians and trees. There are other possibilities, such as artificial trees or plants made of perishable materials other than fired brick, such as metal or wood. Perhaps line 17 of this text describes gold and silver reeds set up as symbols in the temple area.[545] Could *kiškānû*s have been made of similar materials? It is possible: two Boğazköy texts relay that *kiškānû*s were indeed fashioned in metals. One text itemizes silver and gold *kiškānû*s, while the other refers to four *kiškānû*s placed together with garments adorned with gold ornaments.[546]

What of the possibility that the *kiškānû*s adorning the entrance to the *apsû* were living trees? Woolley's interpretation of a feature of the ziggurat at Ur supports such a possibility. According to him, the walls and buttresses of the ziggurat were 'pierced at regular intervals by "weeper-holes"

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kingal-me-šár-ra nam-nun-na sag-íl
abzu-ab-kù-mah é-kiš-nu-gál-la-ke$_4$
nam-mah-gal šà-ta bar-ta-bi
ki-gar é-é$^{!}$-šà-kù-sikil-la-ka
ir-du$_{10}$-ga-tir-šem-$^{\text{giš}}$eren-na-
ha-šu-úr-ra-kam
é KI.GAL-bi šà-é-ke$_4$
an-dul$_7$ é-e me-lám-é-ke$_4$
ub*-gal ub-kù-ge šà-gi-na
giš-hur-ká-na
giš-búr-e aš-me sag-gá-ni uri$_3$ h[u]*-[r]i*-in lah$_4$-lah$_4$
lulim$^{!}$-ma zi-da gùb-bu-b[i*] / kin gal šu dib-dib-b[é]
dingir-ká-na en-nu-un ì-ak-ne
giš-kín-mah ki-bé m[a]-ra-šár-šár
zà-du$_8$ a-sal$_4$-bar-ra si-gar kun$_4$ dub-bi
giš-ig giš-sag-kúl giš-šu-mìn-é-ke4
ki-si-a du$_6$-é-a ki-gar-é-é-šà-kù-/sikil-la-ka
gi-zi-kù-kù-bi kù-zi kù-babbar-ra

For commentary on the passage, see ibid., pp. 289–92.

[544] Other recent translations of lines 12–13 include Wilson, 1994, p. 10, 'The gods of the gate stand guard, In this place exalted *kiškānû*-trees luxuriate for you'; and, G. Cunningham, *'Deliver Me From Evil,' Mesopotamian Incantations 2500–1500 B.C., Studia Pohl Series Maior* 17, Rome, 1997, p. 56, 'in this place the majestic [*kiškānû*]-tree flourishes for you.'

[545] For this interpretation see Wilson's translation, 1994, pp. 10–11, 'These most holy reeds of gold and silver are (all) Beside the pond of the *apsû* of the Ekišnugal.' Consider Wilson's commentary on line 17 (p. 13), 'The reference to these metals would seem to imply symbolic representations of reeds rather than an actual reed hut as Charpin suggests.'

[546] See H. Güterbock, 'Einige seltene oder schwierige Ideogramme in der Keilschrift von Boğazköy,' in E. Neu and C. Rüster, eds., *Festschrift Heinrich Otten, 27. Dezember 1973*, Wiesbaden, 1973, p. 84, '. . . *KBo* XVIII 154, 2f. werden giš.kín [*kiškānû*] aus Silber und Gold aufgezählt; *KUB* XII 1 iii 29 nennt "vier giš.kín" [*kiškānû*] in einem Fach mit Gewändern und zu diesen gehörenden Ornamenten aus Gold.' On p. 84, Güterbock explained these two texts accordingly, 'Demnach handelt es sich anscheinend um eine Frucht, die man knacken und rösten, aber auch in Edelmetall als Ornament nachbilden kann; als ähnliches Beispiel seien die "30 Granatäpfel" von *KUB* XII 1 iii 19 erwähnt.'

left in the brickwork, which run through the burnt-brick encasing wall and to the heart of the mudbrick core.'[547] Dismissing the idea that these holes were intended to dry out any remaining moisture in the mudbrick, Woolley suggested that trees were grown 'on the lower stage [of the ziggurat], between the chambers built up against the walls of the second storey and the terrace edge. . . . [T]he water which the servants poured into the "beds" for the nourishment of the trees would percolate through the soil into the mud brickwork and would constitute a danger against which the "weeper-holes" are the right precaution.'[548] So trees could have been grown on the ziggurat terrace.

Woolley concluded that the idea of a sacred grove on the ziggurat at Ur was 'quite in keeping with the character of that monument.'

> Essentially the Ziggurat is a 'High Place.'. . . [T]he gods honoured [there] were mountain gods; they are portrayed standing or seated on rocky heights, and one must suppose that their original temples were on natural High Places, on hill- or mountaintops such as Nature has omitted to supply in the lower Euphrates Valley. As the names of the ziggurats prove, at Ur these towering masses of brickwork were artificial mountains, recalling the real heights whereon the gods had been worshipped in their original home; that such should have been planted with trees is but carrying the basic idea of them to its logical conclusion.[549]

Margaret Green closely considered the *kiškānû* in texts and concluded that the *kiškānû* could have been planted at the sides of the temple doorways, or that the *kiškānû* could have been portrayed on the temple doorframe as an artificial tree, '[The temple doorway or gateway] might have been designed in imitation of the spreading foliage of a *kiškānû*-tree. . . .'[550]

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[547] Woolley, 1939, p. 98.

[548] Ibid., p. 120.

[549] Woolley, 1939, pp. 120–21. Woolley's ideas concerning the relevance of trees to temple settings are certainly verified in texts: e.g., for 'sacred gardens' attached to temples and for rituals involving gods (as statues) performed therein, see, e.g., Glassner, 1991, p. 11. For sacred groves that existed in Susa and were destroyed by the Neo-Assyrian king Aššurbanipal, see F. Grillot, 'Le "suhter" royal de Suse,' *Iranica Antiqua* 18 (1983), p. 4, n. 7 and p. 11, n. 50. For temple gardens with gods enjoying themselves therein and the cultic function of the garden, see, e.g., Wiseman, 1984, pp. 39–41. More recently, see M. Dietrich, 'Der "Garten Eden" und die babylonischen Parkanlagen im Tempelbezirk,' in J. Hahn, ed., *Religiöse Landschaften, Alter Orient und Altes Testament* 301, Münster, 2002, pp. 9–19. Texts specify that trees and *apsû*s are common to temple settings, and certain trees are associated with sanctuaries and with the *apsû*. According to Wilson, 1994, pp. 26–27, one of these is the *mes*-tree: '". . . The holy *mes*-tree, bearing fruit in the *apsû*." [A text] contains references to other trees associated with the abzu including the tamarisk, the cedar, and the juniper. Another plant which cannot at present be identified with certainty is the *maštakal*-plant mentioned in connection with these trees as part of the purification ceremony at the *apsû*.'

[550] Green, 1975, pp. 190–91. For the suggestion that *kiškānû*s were represented as artificial trees, see M. Green, 'The Eridu Lament,' *Journal of Cuneiform Studies* 30 (1978), p. 149.

Given that real trees could take on sacred significance within temple sanctuaries—as living or even as artificial trees—it does not seem implausible that these trees could have been represented by artificial trees in Assyria, as they may have been at Ur and elsewhere.[551] Not that this settles the problem because we still do not know what, or how, the trees themselves were taken to signify. Were they considered sacred in themselves, or were they thought sacred insofar as they referred to a deity?

At the present time, we do not have enough textual evidence to begin to solve these problems. But perhaps we do know enough to be able to state some tentative working conjectures.[552] Though these conjectures cannot be proven in the current state of our knowledge, they may help us to look for evidence in promising places.

(1) It seems quite possible that the AST-image is an accurate representation of a cult object.
(2) This cult object was perhaps set up in the sanctuary of a temple in Aššur, and replicas may have been set up elsewhere.
(3) Similar but not identical objects may have been placed in the sanctuaries of temples across Assyria.
(4) The object depicted in figs. **1–2** may have denoted Aššur; related types may have denoted other deities (e.g., the Khinnis/Bavian AST-type may have denoted Mulissu, Aššur's consort).
(5) The objects may have represented trees.
(6) Whether or not they represented trees, they were possibly considered as substitutes for gods.
(7) These objects may have received sacrifices and prayers and undergone purification rituals.
(8) As with other kinds of cult statues in the ancient Near East and elsewhere, the AST-object may have taken on sacred power in its own right.

These suggestions are meant not as a summary of research but rather as a plan of action. The present book brings to a close my researches into the historiography of the AST but not, I hope, into its iconography.

For her suggestion that they were planted at the sides of temple entrances, see eadem, 1975, pp. 190–91. Green discussed a number of texts that emphasized a connection among *kiškānûs*, temples and guardian gods; see ibid., pp. 187–91.

[551] See Green, 1975, pp. 187–88, for *kiškānûs* at sanctuaries in Eridu and Nippur.

[552] For a development of some of these conjectures, see my 'Assyrian Trees as Cultic Objects,' in P. Taylor, ed., *The Iconography of Cylinder Seals*, *Warburg Institute Colloquia Series* 9, London and Turin, 2006, pp. 110–25.

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Index

Albenda, P. 20 (n. 41), 95 (n. 248), 120 (n. 316), 121 (n. 319), 122 (n. 320), 171–73
Albright, W. F. 67, 138–39
Altıntepe 135 (n. 353), 154 (n. 403), 170–71
Altman, C. B.—*see* Loud, G.
al-ʿUbaid—*see* ʿUbaid
Andrae, W. 63–64, 67, 115–17, 125, 151–53, 192–94
apkallu 140–41
artificial fertilization—*see* fertilization theory
artificial tree, AST as—*see under* pole
ashêrah 11 (n. 17), 22, 23 (nn. 50, 53), 146, 148–51, 164
Aššur (city) 140, 148, 192, 194, 201
Aššurbanipal 9 (nn. 11–12), 93, 95, 102, 125, 161
Aššurnasirpal II 1, 9, 13, 24, 28, 47, 49, 62, 64, 69, 72–74, 80, 94–95, 101–2, 114, 118–21, 133, 135, 140, 146, 155, 157, 160, 162, 173, 196
Assyrian tree 5
AST
    definition of 5
    ‘arch-and-net’ type 145, 150–51
    ‘cone’-type 52, 66, 79, 114
    ‘palmette’-type 191, 193–94
    ‘pomegranate’-type (or ‘Assurnasirpal’-type) 52, 78, 114, 191, 194
    ‘rosette’-type (or ‘sun’-type) 191–93

Bachmann, W. 194
Balawat Gate 170–71
banduddû—*see under* bucket
Barrelet, M.-T. 158, 179, 195–96
Barton, G. 71–72
basket—*see* bucket
Birdwood, G. 42–43
Black Stone—*see under* Esarhaddon
Bleibtreu, E. 92 (n. 242), 93–96
Bonavia, E. 27–29, 31, 47, 51–56, 58, 70, 74, 77–81, 84, 86, 88, 122–23, 147
Boscawen, W. St. Ch. 46, 53, 55, 70, 74
Botta, P. É. 9 (n. 11)
bucket 32, 36, 45–47, 51–57, 63–64, 66, 69, 74, 77–78, 80–84, 88–89, 133–34, 140–41
    banduddû 141 (n. 374)
Budge, E. A. W. 61–62, 68–70, 74, 82, 89
bull-man and date palm 178, 181–82, 199
bulls and lions with human head
    as *kurību* 39–41, 137–41
    as *šēdu* 39–40, 78

Charles, M. P. 92 (n. 240), 93–94
Charpin, D. 198
Chipiez, C.—*see* Perrot, G.
cherub—*see under* genie; *see also* bulls and lions with human head as *kurību*
claim of Biblical parallels 29–30, 37, 39, 67, 137–39
claim of formal similarity 27–28, 30–32, 35, 62, 65, 68–69, 75–76, 87, 96, 113, 115–17, 119–20, 123, 125, 128, 131
claim of social significance 28–30, 36, 47, 51, 65, 67, 69, 71–76, 87, 96, 131–32, 135–36
climatic conditions for date harvesting in Assyria 47–51, 57, 65–66, 70, 89, 91–102, 112, 147, 149

Cocquerillat, D. 111 (n. 291), 112
column, AST as—*see under* pole
cone-like object 32, 34–36, 45, 47, 51–53, 56, 70, 74–75, 77–89, 103–112
  as male date palm inflorescence (or spadix or flower) 32, 34–36, 51, 63–69, 74, 79, 82, 96, 103–5
  as a bunch of dates 83–86, 113, 131, 133–34
  as a citron 84
  in 'fruit of the cedar' spell 46, 54, 77, 80
  together with bucket as ritual instrument for anointing 1, 45–47, 51, 54–55, 69–70, 77, 80–83, 88–89, 123, 147, 169 (n. 452), 173
  as aspergillum 54–56, 69–70, 74–75, 77, 81, 83, 89
  mullilu 141 (n. 374)
cosmic tree 2 (nn. 5–6)
cult furniture, AST as—*see under* pole
cult object, AST as 3, 5, 22–25, 32, 70, 146, 149–50, 155, 157–62, 164, 166, 168–69, 171–73, 190, 193, 195–97, 201

D'Alviella, E. G. 2 (n. 6), 17 (n. 31), 40–43, 56–58, 72, 74, 86, 96–98
Danthine, H. 1 (n. 3), 87 (n. 226), 104, 114 (n. 299), 122–24, 135, 171 (n. 458), 192
Darius I 18 (n. 33), 189–90
date palm, AST as 2–3, 13–14 (n. 23), 19, 22, 28–37, 41–43, 47–53, 56–58, 61–76, 78–79, 83, 85, 87–89, 91–102, 103–129, 131–39, 147, 153, 155, 166, 192, 197
  (cf. palm)
De Candolle, A. 50–51
Delitzsch, F. 16
De Mecquenem, R. 179–82
De Morgan, J. 179–80
Dhorme, É. P. 16 (n. 29)
djed pillar, AST as—*see under* pole
Dowson, V. H. W. 99–100, 104–7

Ebeling, E. 114–15
Eden, garden of 2, 9–20, 129–34
emblem, AST as—*see* symbol
Eridu 12, 13 (n. 21), 14 (n. 23), 15–16, 19, 72
Esarhaddon 9 (nn. 11–12)
  Black Stone 9 (n. 12), 23, 25, 27–29, 88, 114, 128
  prisms 171
Ezekiel 10, 37, 39, 41–43, 129, 131, 137–38

Fergusson, J. 22–25, 28, 88, 128, 145–46
fertilization theory 3, 31–37, 45, 47, 51–53, 56–58, 61–89, 91, 97, 102- 12, 128, 130, 132–33, 135–37, 139, 147, 151, 172
  sprinkling or shaking method of pollination 32–35, 81–82, 87, 104–6, 108, 110, 112
  branch-tying or inserting method of pollination 33–34, 81–82, 87, 104–6, 109–10, 111 (n. 291), 112
  dusting method of pollination 107–8
  wind pollination 33–34, 87, 110–11
Fort Shalmaneser 9 (n. 12)
Frankfort, H. 17 (n. 30), 65, 157–61, 163–69
furniture, cult—*see under* pole

Garlick, C. 64–65, 70, 87–88, 96–97, 117–19
genie
  winged and holding 'cone' and bucket 1, 3, 9–10, 32, 34–36, 39, 41, 45–48, 51–58, 61, 64, 67–70, 75, 78–81, 83, 88–89, 96, 104, 108 (n. 284), 112, 132 (n. 348), 134, 140–41, 147–48
  winged, as cherub 15, 30, 37, 39, 41–43, 67, 129–31, 137–41
Green, M. 197 (n. 538), 200

Gungunum 188–89

Hall, H. R. 182, 185
Hammurabi (code of) 66, 109–10, 112
Heinrich, E. 184
Herodotus 33–34, 48 (n. 108), 65–66, 68, 81, 86, 104–5, 107, 189–90
Herzfeld, E. 88–89
Heuzey, L. 74, 77–82, 86, 107 (n. 278), 147, 196 (n. 534)
homa 10 (n. 14)

iconography 4 (n. 8), 32, 42, 53, 58, 197, 201
iconology 4 (n. 8)

Kantor, H. 158, 165–68, 171–72
Kar-Tukulti-Ninurta 63, 115, 120 (n. 316), 164, 166 (n. 440), 188 (n. 505), 190
Kepinski, C. 114 (n. 299), 122 (n. 320)
Khinnis/ Bavian 194, 195 (n. 526), 201
Khorsabad 9 (nn. 11–12), 39, 79, 101, 157–58, 160, 163–64, 167, 170, 177–78, 182, 188, 191
kiškānû 2, 12–20, 37, 72, 129, 197–201
  as oracle-tree 17 (n. 30), 72
kurību 39–40, 137–41
Kyrieleis, H. 158, 169–72

Lambert, W. G. 76 (n. 191), 97 (n. 252), 122 (n. 320), 132 (n. 348), 135
Langdon, S. 139–40, 168, 173
Larsa 188
Layard, A. H. 1 (nn. 1–2), 9–11, 21–22, 24, 32, 37, 39, 41–42, 49 (n. 112), 118–19, 129, 137, 154–55, 157
lebensbaum—*see* sacred tree
Leilan, Tell 186–87
Lenormant, F. 13, 23–25, 39–40, 46–47, 53, 70, 77, 80, 84, 137–38
Loftus, W. 184
Loud, G. and C. B. Altman 157–58, 160–61, 163, 165, 177, 179

Madhloom, T. 169 (n. 452)
Mallowan, B. 98 (n. 253), 116 (n. 308), 120 (n. 316), 121 (nn. 317–18), 158, 168–69, 188 (n. 505), 190 (n. 515)
Mallowan, M. 158, 168
Mannhardt, W. 23
Mari 128 (n. 337), 187, 195, 196 (n. 535)
Meissner, B. 66–67, 89
metal attachments, bands or binding elements—*see under* pole (including ‘double-volute’ binding element and ‘double-crescent’ binding element or ‘c-clamp’ binding element)
Mosul 92–93, 95, 99, 101–2, 133
mullilu—*see under* cone-like object

Nabû-apla-iddina 178
Nimrud 1, 9, 39, 61, 80, 92, 94–95, 101–2, 126–27, 140, 147, 153–55, 157–58, 160, 162, 169–71, 194
Nineveh 9 (nn. 11–12), 47, 92–93, 95, 99, 101–2
Noldeke, A. 184

Oates, J. and D. 92 (n. 241), 93–94, 127
omphalos, AST as 150–51

Paley, S. 158–61
palm, AST as 12, 15 (n. 24), 21, 24, 42–43, 52, 56, 64, 69, 72–73, 85–86, 116, 124, 129, 131–32, 135, 137–38, 146, 163
  (cf. date palm)
palmette 1, 24, 36, 79, 113, 115–17, 120–21, 125, 155, 167, 172, 194, 196
  honeysuckle ornament 21, 129
Panofsky, E. 4 (n. 8)
Parker, B.—*see* Mallowan, B.
Parpola, S. 1 (n. 3), 2 (n. 6), 19–20, 114 (n. 299), 122 (n. 320), 126 (n. 329)
Pering, B. 87–89, 117 (n. 310), 149–52
Perrot, G. and C. Chipiez 54, 154, 178

Perrot, N. 79 (n. 202), 81 (n. 209), 86 (n. 225), 87 (n. 226), 122–24, 134
Pinches, T. G. 12 (n. 19), 13 (n. 22), 19 (n. 34), 47, 78–79, 82
pinecone-like object—*see* cone-like object
Place, V. 157, 163, 177–79
Pliny 33–34, 49 (nn. 111, 113), 50, 65, 81, 104–5, 108, 111 (n. 290)
pole
  AST as pole 1, 62, 119, 124, 146, 148–49, 151–55, 157–59, 161, 163–66, 170, 173 (n. 465), 192, 196
  AST as artificial tree 24, 157–58, 163–64, 166, 168–69, 171, 188–91, 196, 201
  AST as cult furniture 24, 159–62, 167, 169, 171, 173 (n. 465)
  AST as may-pole 23–24, 87–88, 117, 146, 164, 166
  AST as pillar (or column) 21–22, 24 (n. 54) , 169, 188
  AST as *djed* pillar 146, 148, 164
  metal attachments, bands or binding elements on 146–49, 153–55, 157–61, 163–64, 167, 169–72, 183, 191–94, 196
    as horns (of an animal) 21, 155 (and n. 407)
    artificial trees and tree parts 177–90, 195–201
    Akkadian term for 190–91
Popenoe, P. 14 (n. 23), 71–73, 76, 93, 99–101, 105–7
Porada, E. 116–17, 125, 133, 158
Porter, B. N. 20 (n. 40), 92 (n. 239), 97 (n. 252), 98 (n. 253), 100 (n. 257), 103, 105 (n. 273), 108 (n. 284), 112, 120 (n. 316), 125 (n. 327), 136
Postgate, J. N. 93 (n. 243), 94
pre-iconography 4–5, 32, 53, 56, 58, 121, 197
Pruessner, A. H. 61–62, 66, 109–10, 112
Ptolemy II Philadelphus 188–89
Puchstein, O. 153–55, 169–70, 192 (n. 518)

Ragozin, Z. 24, 40–41
Rassam, H. 47, 91 (n. 238)
Rawlinson, G. 11, 18, 21–22, 25, 31–32, 45–50, 53, 70, 77, 81, 83 (n. 214), 91 (nn. 236–37), 100 (n. 257), 145–46, 155 (n. 407), 173
Rawlinson, H. C. 18
Richardson, S. 126 (n. 329)
Riegl, A. 24, 148, 153–55, 159–60, 166–72, 191
riksu, riksānu—*see under* pole, metal attachments, Akkadian term for
Rimah, Tell 186–87
Rīm-Sîn 197–98
Roaf, M. 160–61
Russell, J. 1 (n. 2), 9 (n. 13), 20 (n. 41), 92 (n. 239), 137 (n. 359), 138 (n. 361), 139 (n. 366), 140 (n. 372), 160 (n. 421), 173 (n. 465)

sacred tree, AST as 1–3, 5, 10, 14 (n. 23), 17 (n. 30), 22, 24, 28, 31, 58, 68, 72, 85–86, 116, 129–32, 134–36, 148, 159–60, 163–65, 167–69, 171–73, 192
Sargon II 9 (nn. 11–12), 79, 127, 157, 170, 177
Sarton, G. 73–77, 86
Sayce, A. H. 11–17, 29–30, 37, 68, 72
Seidl, U. 154 (n. 403), 170 (n. 454), 190 (n. 515), 196 (n. 536)
Sennacherib 9 (n. 11), 95 (n. 247), 101, 119
Shalmaneser III 9 (n. 12), 153
Smith, G. 17
Smith, S. 77 (n. 192), 82, 146–49, 153, 157–61, 163–69
Speleers, L. 114, 145–46, 168
stylized tree, AST as 5, 87 (n. 226), 98, 116 (n. 307), 120 (n. 316), 122 (n. 320), 136 (n. 356), 137 (n. 359), 159–60, 165, 169 (n. 451)

Susa 179–82, 188, 191, 199
symbol, AST as 1–2, 5, 10, 21, 23–25, 28–29, 57–58, 63, 65, 67, 71–74, 78, 79 (n. 203), 88 (and n. 230), 91, 96–98, 102, 117 (n. 308), 121, 123–26, 128–29, 130 (n. 339), 135, 145–46, 148, 151–52, 164–65, 168, 171 (n. 458), 172–73, 193–94, 196 (n. 536), 201

Terrien de Lacouperie, A. E. 2 (n. 6), 24 (n. 54), 53 (n. 125), 74
Theophrastus 33–34, 65, 81, 104–5, 108
Thompson, R. C. 12 (n. 18), 108, 111 (n. 291)
Tiglath-Pileser III 9 (nn. 11–12), 119, 127
tree of abundance, AST as 135–36
tree of fortune, AST as 130–31, 133–34, 136
tree of knowledge of good and evil, AST as 17 (n. 30), 130–31
  as Sefirotic tree 19, 197
tree of life, AST as 2, 5, 10–20, 29, 37, 58, 62–64, 67, 72, 115, 129–31, 136, 192, 197
Tukulti-Ninurta I 63, 190
Tylor, E. B. 31–37, 39, 41–43, 45, 47–49, 51–53, 56–58, 61–79, 81–83, 86–88, 96–97, 103–5, 108, 110, 112, 116, 122, 131, 137–39, 147

'Ubaid, Tell 182–86
Unger, E. 70, 113–14
Ur 184–86, 188, 197, 199–201
Uruk 184–85

Van Buren, E. D. 2 (n. 4), 5 (n. 9), 168 (n. 447), 188 (n. 506), 195 (n. 528), 196 (n. 536)
Von Luschan, F. 65–68, 113, 153–55, 167, 169

Warad-Sîn 185, 188, 197
Ward, W. 14 (n. 23), 62, 83–87, 113, 123, 130–38
Weber, O. 62–63, 115
Weiss, H. 186 (n. 500), 187
Wensinck, A. 151
Widengren, G. 168, 197 (n. 538)
Winter, I. J. 4 (n. 8), 97 (n. 252), 117 (n. 308), 120 (n. 316), 124–27, 136 (nn. 356–58), 165 (n. 434)
Woolley, C. L. 182–86, 197–200
world tree 2 (n. 6)
Wurz, E. and R. 113, 153, 155, 167, 169

Xerxes 189

Yaqut, Ibn 102
York, H. 5 (n. 9), 122 (n. 320), 169 (n. 452), 195 (n. 531), 197 (n. 538)

Zimmern, H. 149
Zimri-Lim 187, 195–96

List of Figures

1. Wall relief of kings on either side of AST. Aššurnasirpal II; Nimrud. (British Museum, ANE 124531).
2. Wall relief of eagle-headed genies on either side of AST. Aššurnasirpal II; Nimrud. (British Museum, ANE 124583).
3. Black basalt 'memorial' stone. Date palm and two ASTs. Esarhaddon; unprovenanced (probably Babylon). (British Museum, ANE 91027).
4. Photo of human hand holding dried date spathe. Garden at La Mortola, Riviera. (Tylor, 1890, pl. 2, fig. 5).
5. Wall relief of genie holding 'cone.' Aššurnasirpal II; Nimrud. (Tylor, 1890, pl. 2, fig. 6).
6. Photo of a date spathe. Garden at La Mortola, Riviera. (Tylor, 1890, pl. 2, fig. 7).
7. Drawing of a date spathe. After Kaempfer, 1712. (Tylor, 1890, pl. 2, fig. 8).
8. Photo of male date palm blossoms. (Arboretum of Arizona State University; after Miller, 2000, fig. 4).
9. Photo of male date palm blossoms. (Source unknown; E. and R. Wurz, 1925, p. 9, Abb. 9).
10. Photo of male date palm blossoms drying in the sun next to a meter stick. Shahdad, Kerman, Iran. (FAO, United Nations; after Dowson, 1982, p. 61).
11. Photo of female date palm blossoms. (Source unknown; E. and R. Wurz, 1925, p. 9, Abb. 10).
12. Drawing of a female date spadix and spathe. (Deutsches Archäologisches Institut; after Cocquerillat, 1968, pl. 2).
13. Drawing of wall relief of embroidery on king's garments. Aššurnasirpal II; Nimrud. (Perrot and Chipiez, t. 2, 1884, pl. 443).
14. Wall relief detail of genie holding bucket with engraved image. Aššurnasirpal II; Nimrud. (Brooklyn Museum, BM 55.147).
15. Cylinder seal impression of kings and genies and 'pomegranate-type' AST. Aššurnasirpal II. Unexcavated (?). Perhaps found in a Neo-Assyrian temple in Tarbisu. (British Museum, ANE 89135).
16. Drawing of 'cone-type' AST appearing on a wall relief. Aššurnasirpal II; Nimrud. (Tylor, 1890, pl. 4, fig. 19).
17. Drawing of wall painting of genies on either side of rosette. Sargon II; Khorsabad. (Tylor, 1890, pl. 3, fig. 16).

18. Reconstructed wall painting showing a part of the earliest known AST; and detail, and drawing of detail of AST and genie. Tukulti-Ninurta I. Kar-Tukulti-Ninurta. (The darker parts and dark lines denote extant paint; the lighter parts and light lines are reconstructed.) (Andrae, 1925, pl. 3).
19. Wall relief of genie 'anointing' king who holds bow/arrows. Aššurnasirpal II; Nimrud. (British Museum, ANE 124567).
20. Wall relief of genie holding 'cone' and bucket. Sargon II; Khorsabad. (Pottier, 1924, pl. 9, 18; Musée du Louvre AO 19863).
21. Reconstruction of reliefs adorning entrance to Court VIII (leading to the throneroom). Sargon II; Khorsabad. (Loud, 1936, fig. 45).
22. Drawing of wall relief of embroidery on king's garments. Aššurnasirpal II; Nimrud. (Perrot and Chipiez, t. 2, 1884, pl. 444).
23. Drawing of a wall relief of a genie's bucket. Aššurnasirpal II; Nimrud. (Perrot and Chipiez, t. 2, 1884, fig. 396).
24. Wall relief of captives and booty. Aššurnasirpal II; Nimrud. (British Museum, ANE 124539).
25. Drawing of a Mitannian cylinder seal impression of two bull-men pulling at a 'tree.' Unexcavated. (Ward, 1910, fig. 706; Metropolitan Museum, Ward 706).
26. Drawing of a Middle Assyrian cylinder seal impression of genie pulling at a 'tree.' Unexcavated. (Ward, 1910, fig. 707; The Morgan Library & Museum, Morgan 160).
27. Map of modern Iraq. (After Rousset, 1992).
28. Map of ancient Iraq during the Neo-Assyrian period. (After Moortgat, 1969, pp. 344–45).
29. Detail of wall relief of 'Garden-Party' or 'Banquet Scene.' Aššurbanipal; Nineveh. (British Museum, ANE 124920).
30. Map showing distribution of date palms in Iraq, 1921. (Dowson, pt. 1, 1921).
31. Man squatting near male date palm flower clusters (spadices). Baghdad, 1918. (Dowson, pt. 1, 1921, pl. 23).
32. Men splitting flower clusters from male palms into individual sprigs. Baghdad, 1930s. (Dowson, pt. 1, 1949, pl. 221, fig. 2).
33. Man holding male date palm flower cluster. Middle East, 1935. (Danthine, 1937, pl. 2, 7).
34. Men splitting flower clusters from male palms into individual sprigs. Baghdad, 1930s. (Dowson, pt. 1, 1949, pl. 223, fig. 1).
35. Man holding a 'pollen bag.' (Dowson, pt. 1, 1921, pl. 24).
36. Man using 'pollen bag' to fertilize a tall date palm. (Dowson, pt. 1, 1921, pl. 25).
37. Cylinder seal and impression with 'net-type' AST and worshipper and other symbols. Neo-Assyrian period. (Royal Museums of Art and History, Brussels O.788).
38. Comparison between AST and image of a date palm. (Garlick, 1918, figs. 1–2).

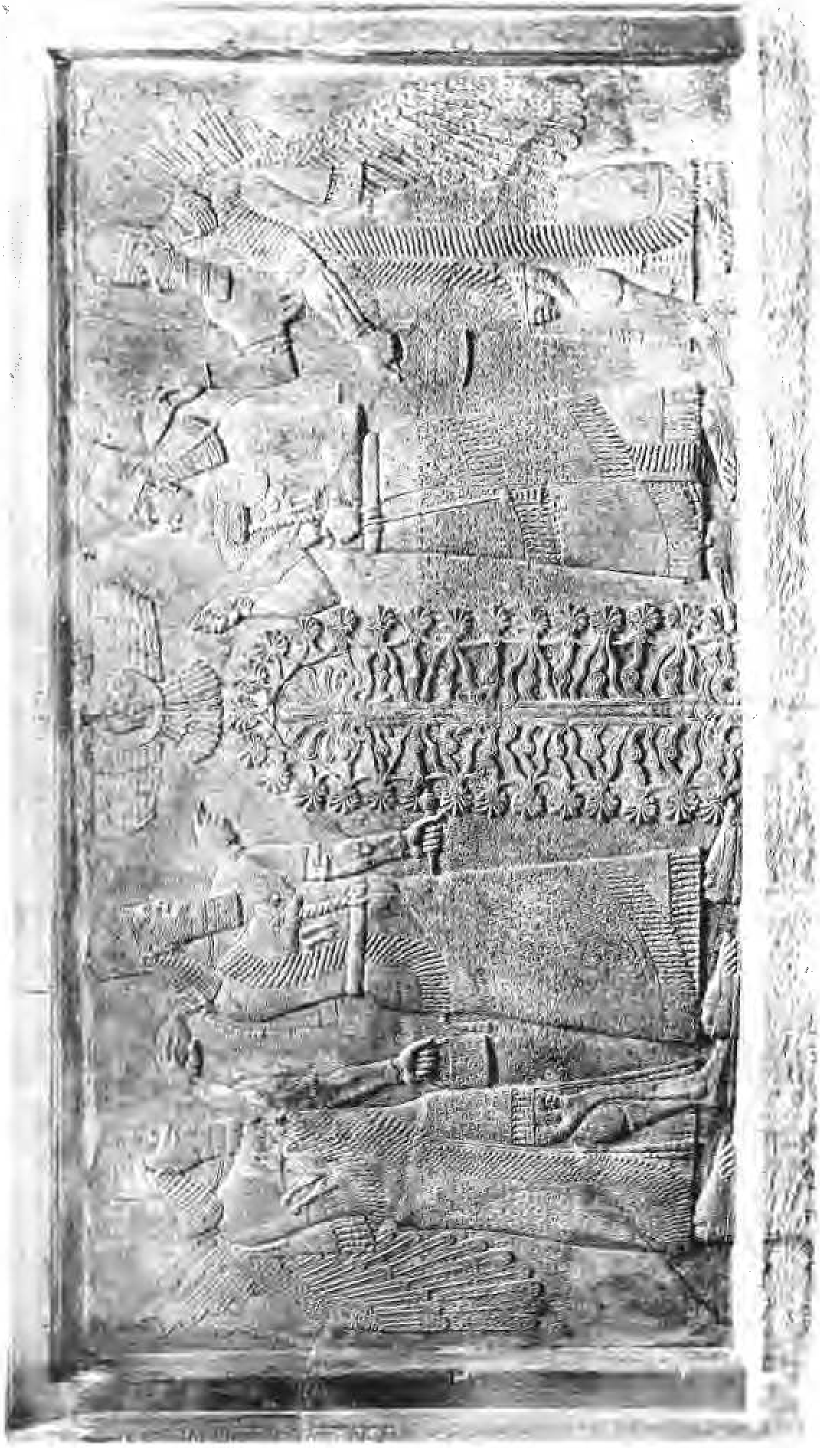
39. Drawings of fan- and feather-shaped palms. (After Gammell, 1989, pp. 6–7).
40. ‘Feather-type’ date palm. (www.ag.arizona.edu).
41. Relief with schematized date palm represented in the background. Aššurnasirpal II; Nimrud. (British Museum, ANE 124538).
42. Drawing of relief of our fig. 41. Aššurnasirpal II; Nimrud. (Perrot and Chipiez, t. 2, 1884, fig. 38; detail after Layard, *Monuments* 1, 1849, pl. 33).
43. Cylinder seal impression showing worship of a naturalistic palm. Neo-Assyrian period. (British Museum, ANE 134770).
44. Drawing of cylinder seal impression showing worship of a naturalistic palm. Neo-Assyrian period. (Ward, 1910, no. 680; Metropolitan Museum, Ward 680).
45. Relief with naturalistic date palms. Tiglath-Pileser III; Nimrud. (British Museum, ANE 118904).
46. Relief with naturalistic date palm. Tiglath-Pileser III; Nimrud. (British Museum, ANE 118902).
47. Relief with naturalistic date palms. Sennacherib; Nineveh. (British Museum, ANE 124782).
48. Relief with naturalistic date palms. Sennacherib; Nineveh. (British Museum, ANE 124774).
49. Drawing of AST and kings in our fig. 1. Aššurnasirpal II; Nimrud. (Detail after Layard, *Monuments* 1, 1849, pl. 25).
50. Drawing of relief of canopied structure in a military camp. Aššurnasirpal II; Nimrud. (Perrot and Chipiez, t. 2, 1884, fig. 67; British Museum, ANE 124548).
51. Relief of winged genie carrying palmette plant. Aššurnasirpal II; Nimrud. (British Museum, ANE 124560).
52. Drawing of relief of winged genie carrying palmette plant in our fig. 51. Aššurnasirpal II; Nimrud. (After Layard, *Monuments* 1, 1849, pl. 35).
53. Relief of genie carrying an ear of wheat. Aššurnasirpal II; Nimrud. (British Museum, ANE 124561).
54. Relief of genie and palmettes. Aššurnasirpal II; Nimrud. (Metropolitan Museum, MMA 32.143.9).
55. Relief of palmettes carved on the king’s garment. Aššurnasirpal II; Nimrud. (British Museum).
56. Relief of palmettes carved on the king’s garment. Aššurnasirpal II; Nimrud. (British Museum).
57. Drawing of cylinder seal impression featuring palmette or palm worship. Neo-Assyrian period. (For photo see Parker, 1962, pl. 18, 4; Iraq Museum, ND 7833).
58. Three pendants hinged together: one blank, one with an AST, one with a date palm. Tomb II, 8th century BC; south wing of the North-west Palace, Nimrud. (Iraq Museum, IM 105813, 105814, 105815).

59. Gold ribbon and agate diadem. Tomb II, 8th century BC; south wing of the Northwest Palace, Nimrud. (Iraq Museum, IM 105696).
60. Ivory female head with rosette diadem. Sargon II; Southeast Palace, Nimrud. (Metropolitan Museum, MMA 54.117.8).
61. Drawing of cylinder seal impression with 'arch-and-net' AST and worshipper. Neo-Assyrian period. (Ward, 1910, fig. 686; Metropolitan Museum, Ward 686).
62. Drawing of cylinder seal impression of 'arch-and-net' AST and worshipper. Neo-Assyrian period. Impressed onto tablets found at Susa. (Ward, 1910, fig. 690; Harvard Semitic Museum, Sem. 1356).
63. Red-figure vase painting of Orestes embracing the omphalos in Zeus' temple at Delphi. 4th century BC. (Roscher, 1913, Taf. 3, 2; Naples Museo Nazionale, Nap. 3249).
64. Marble omphalos. Apollo temple, Delphi. 5th–4th century BC. (Delphi Museum, Del. 24749).
65. Drawing of bronze relief of canopied structure in a military camp. Shalmaneser III; Balawat. (Puchstein, 1907, Abb. 35; British Museum, ANE 124655).
66. Drawing of bronze relief of canopied structure in a military camp. Shalmaneser III; Balawat. (Perrot and Chipiez, t. 2, 1884, fig. 68; British Museum, ANE 124653).
67. Photo and drawing of bronze double-crescent binding. Aššurnasirpal II; Nimrud. (British Museum, ANE 119429) (Perrot and Chipiez, t. 2, 1884, fig. 388).
68. Detail of four bronze double-volute bindings. Aššurnasirpal II; Nimrud. (British Museum, ANE N 710, N 420, N 421, N 423).
69a. Photo and drawing of relief of Aššurnasirpal II enthroned. Aššurnasirpal II; Nimrud. (British Museum, ANE 124565; drawing from Layard, *Monuments* 1, 1849, pl. 5).
69b. Victorian-era reconstructed throne (now disassembled). Aššurnasirpal II; Nimrud (for throne reconstruction see von Luschan, 1912, Abb. 5).
70. Drawing of a column from the glazed brick relief decorating the facade of the throneroom of the southern citadel at Babylon. Nebuchadnezzar; Babylon. (After Roaf, 1996, fig. 6a; Vorderasiatisches Museum).
71. Cylinder seal impression showing an AST-type enclosed in a niche. Neo-Assyrian period; unexcavated. (British Museum, ANE 102966).
72. Drawing of iron helmet with bronze inlay of royalty enclosed in a niche. Neo-Assyrian period; Nimrud. (Dezsö and Curtis, 1991, p. 123, fig. 21; British Museum, ANE 22496).
73. Place's reconstruction of two poles encased in bronze sheathing embossed with palm trunk imbrications. Reconstruction of entrance to Sîn Temple, Khorsabad. Sargon II. (Perrot and Chipiez, t. 2, 1884, fig. 197).
74. Photo and drawing of relief of throne decorated with ASTs. Sargon II; Khorsabad. (For photo see Basmachi, 1975–76, no. 138; drawing after Hrouda, 1965, Taf. 16, 3; Iraq Museum, IM 18629).

75. Photo and drawing of terrracotta prisms (top view) impressed with an AST. Esarhaddon; unprovenanced (probably Babylon). (British Museum, ANE 78223, 78247; drawing from Pinches, 1963, pl. IV, no. 3).
76. Drawing of pieces of bronze sheathing with design of palm trunk imbrications. Sargon II; Khorsabad. (Perrot and Chipiez, t. 2, 1884, fig. 72; Musée du Louvre, N111 3100).
77. Drawing of limestone plaque showing the worship of Šamaš in human and symbolic form. Nabû-apla-iddina; Sippar. (Perrot and Chipiez, 1884, t. 2, fig. 71; British Museum, ANE 91000).
78. Clay plaque of bull-men standing on either side of palm decorated 'trunk' crowned by a sun disk. Isin-Larsa period; Ischali. (Oriental Institute, Chicago, OrInstA9337).
79. Drawing of bronze leaf found in a deposit near a column of inscribed bricks. Middle Elamite period; Susa. (De Morgan et al., 1905, fig. 77; Musée du Louvre).
80. Photo and drawing of bronze sepal (?) found in a deposit near the Inshushinak temple. Middle Elamite period; Susa. (De Morgan et al., 1905, fig. 167 and pl. 19, 9; Musée du Louvre).
81. Drawing of bronze leaves found in a deposit near the Inshushinak temple. Middle Elamite period; Susa. (De Morgan et al., 1905, figs. 176–77; Musée du Louvre, Sb 18044).
82. Drawing of bronze leaves found in a deposit near the Inshushinak temple. Middle Elamite period; Susa. (De Morgan et al., 1905, figs. 178–79; Musée du Louvre, Sb 2194).
83. Drawing of bronze branches with leaves found in a deposit near the Inshushinak temple. Middle Elamite period; Susa. (De Morgan et al., 1905, figs. 180–82; Musée du Louvre, Sb 17930–31).
84. Drawing of bronze palm fronds found in a deposit near the Inshushinak temple. Middle Elamite period; Susa. (De Morgan et al., 1905, fig. 183; Musée du Louvre, Sb 18052–55, 18057).
85. Drawing of de Mecquenem's reconstruction of baked clay brick relief. Shilhak-Inshushinak; Susa. (De Mecquenem, 1922, pl. 6).
86. Drawing of most recent reconstruction of baked clay brick relief of bull-man and date palm. Shilhak-Inshushinak; Susa. (For photo see Harper et al., 1992, cat. no. 88; Musée du Louvre, Sb 14390–91, 19575–77).
87. Woolley's reconstruction of entrance stairway to Ninhursag temple. ED III period; al-'Ubaid. (Hall and Woolley, 1927, pl. 38).
88. Reconstruction of mosaic column. ED III period; al-'Ubaid. (Hall and Woolley, 1927, pl. 34, 3).
89. Recovered mosaic column. ED III period; al-'Ubaid. (Hall and Woolley, 1927, pl. 35, 7; British Museum, ANE 115328, and University Museum, Philadelphia, Phil B15887).
90. Nöldeke's reconstruction of the 'Pillar Hall' in the Eanna precinct. Jemdat Nasr period; Uruk. (Nöldeke et al., 1932, Taf. 8).

91. Plan of columns from 'Pillar Hall.' Jemdat Nasr period; Uruk. (Nöldeke et al., 1932, Taf. 7).
92. Drawing from Loftus' survey at Warka of terracotta cones stuck into clay columns or walls. Jemdat Nasr period; Uruk. (Hall and Woolley, 1927, p. 49, fig. 15; British Museum, ANE 115711).
93. Engaged cone-mosaic column from 'Pillar Hall.' Jemdat Nasr period; Uruk. (Woolley, 1935, fig. 9; British Museum).
94. Drawing of a detail from a cylinder seal impression featuring Ea near a fruiting date palm. Akkadian period. (For photo see Amiet, 1973, no. 257; Musée du Louvre, AO 11569).
95. Plan of ziggurat terrace showing retaining wall with entrance. Warad-Sin; Ur. (Woolley, 1939, pl. 70).
96. Reconstruction of retaining wall and entrance. Warad-Sin; Ur. (Woolley, 1939, pl. 71).
97. Entrance of retaining wall. Warad-Sin; Ur. (Woolley, 1935, fig. 57b).
98. Imbricated mudbrick column at the entrance of the retaining wall. Warad-Sin; Ur. (Woolley, 1939, pl. 30b).
99. Cylinder seal impression and drawing showing 'rosette-type' AST. Neo-Babylonian period. (Von der Osten, 1936, pl. XI, fig. 129; formerly Brett Coll., Brett 129).
100. Cylinder seal and drawing of impression showing 'rosette-type' AST. Neo-Babylonian period. (Sotheby's London, 1997, cat. no. 90; formerly Erlenmeyer Coll.).
101. Cylinder seal and impression showing 'rosette-type' AST. Neo-Babylonian period. (Staatliche Münzsammlung, München, Arndt Collection, 1087).
102. Cylinder seal impression showing 'rosette-type' AST. Neo-Babylonian period. Impressed onto tablets found at Susa. (Delaporte, t. 1, 1920, pl. 48, 18; Musée du Louvre, Sb 12904).
103. Photo and drawing of bronze 'standard' top. Neo-Assyrian period; Aššur. (Vorderasiatisches Museum, VA Ass. 10400; drawing from Andrae, 1933, Abb. 34).
104. Photo and drawing of mirror with 'palmette-type' AST enamelled handle. Neo-Assyrian period; Nimrud. (For photo see Hussein and Suleiman, 2000, no. 40; Iraq Museum, IM 115469).
105. Drawings and photos of relief of goddess holding 'pomegranate-type' AST standard. Sennacherib; Khinnis/Bavian. (Paterson, 1912–13, pl. 104; Bachmann, 1927, Taf. 10, 12).
106. Drawing of relief of AST-type on genie's garment. Aššurnasirpal II; Nimrud. (Perrot and Chipiez, t. 2, 1884, fig. 445).
107. Drawing of 'Investiture Scene' painting of Zimri-Lim and Ištar. Zimri-Lim; Mari. (After Barrelet, 1950, fig. 12d; Musée du Louvre, AO 19826).

Figures



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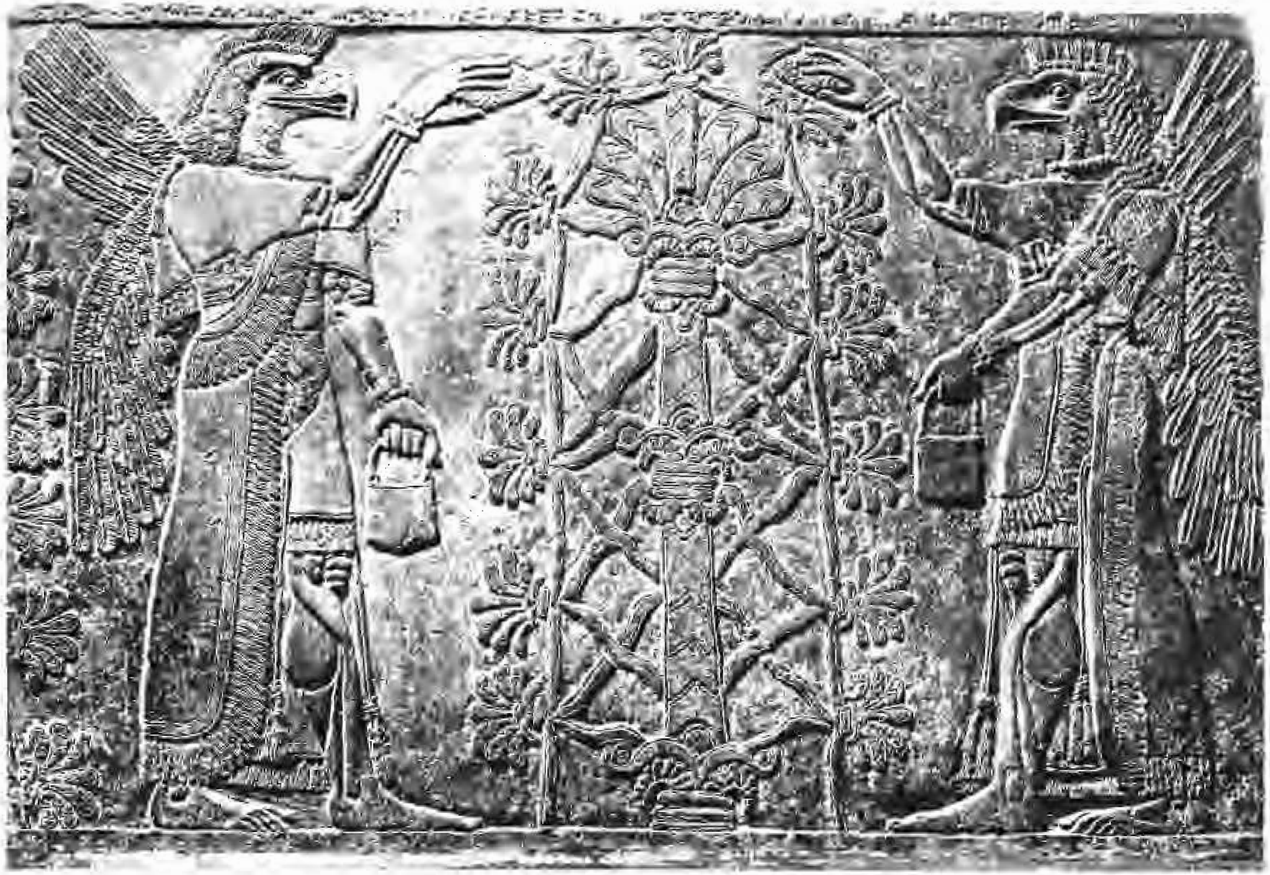

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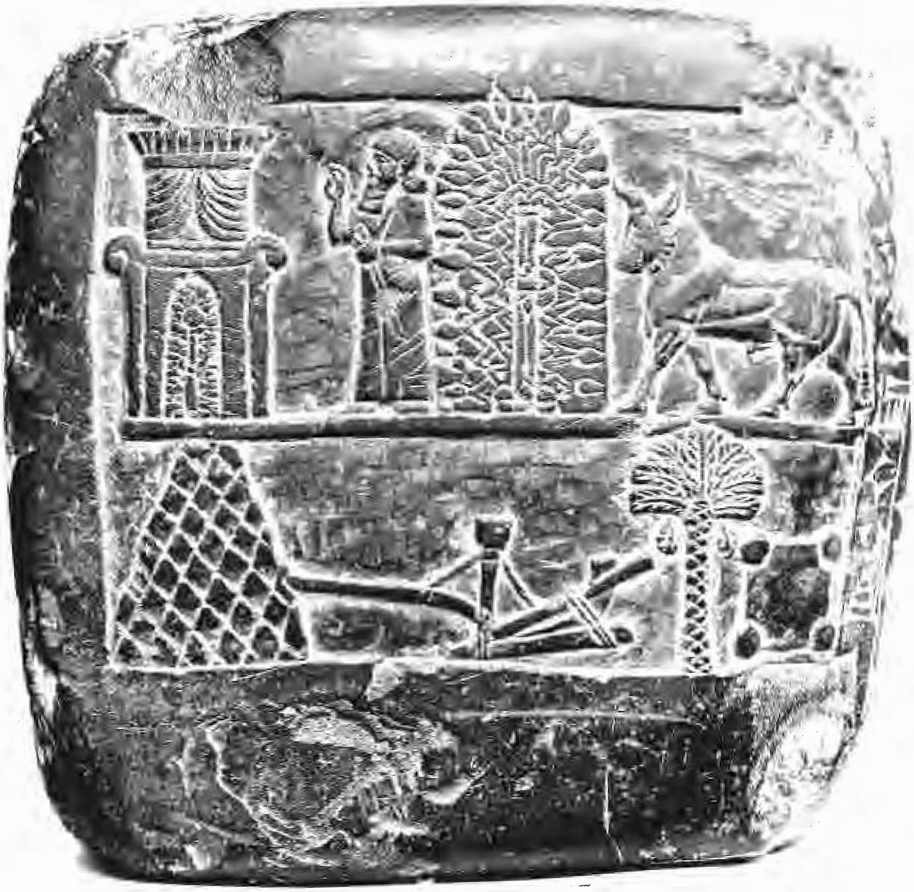

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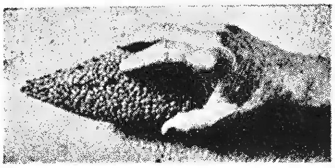

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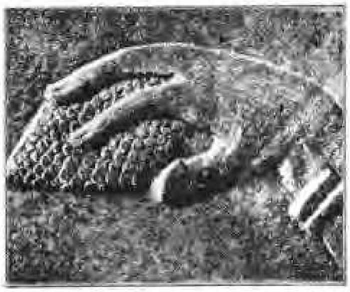

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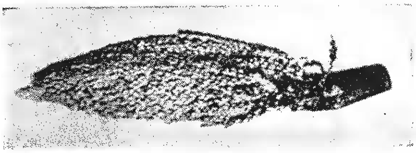


Fig. 6

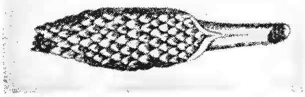
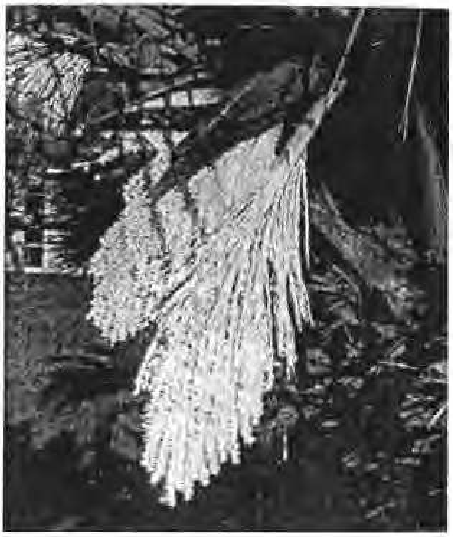


Fig. 7



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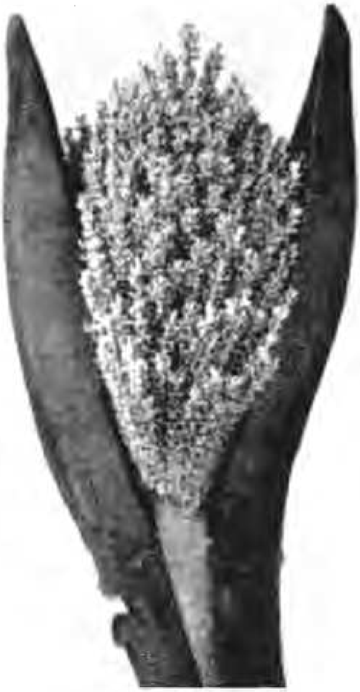


Fig. 9

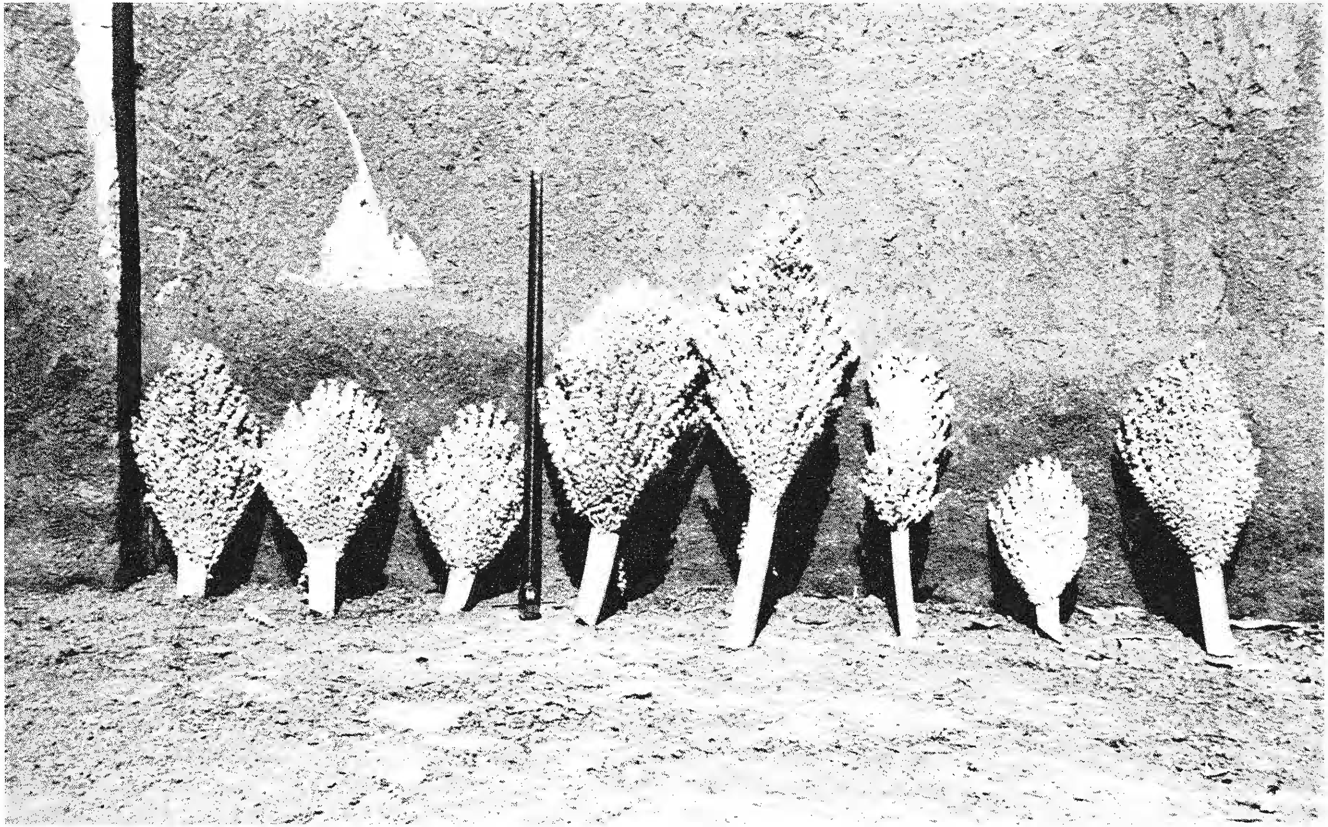


Fig. 10

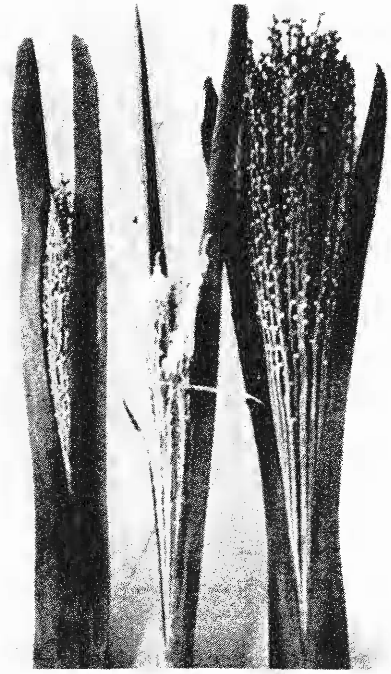


Fig. 11

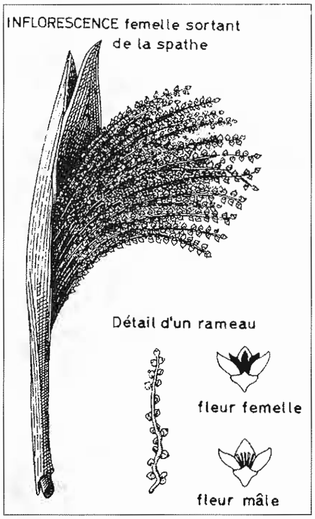

INFLORESCENCE femelle sortant de la spathe
Détail d'un rameau
fleur femelle
fleur mâle

Fig. 12

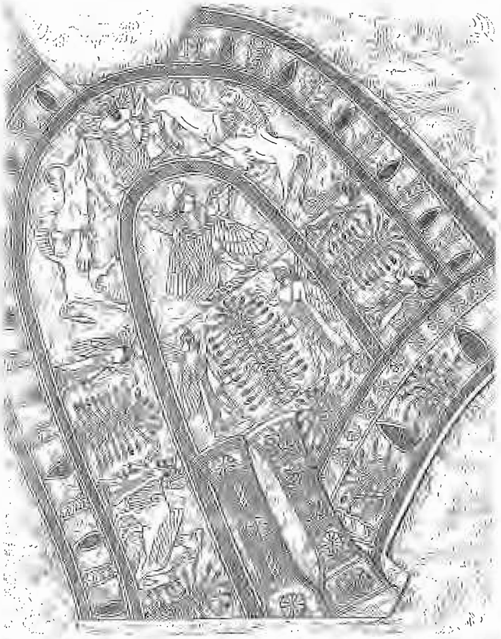


Fig. 13

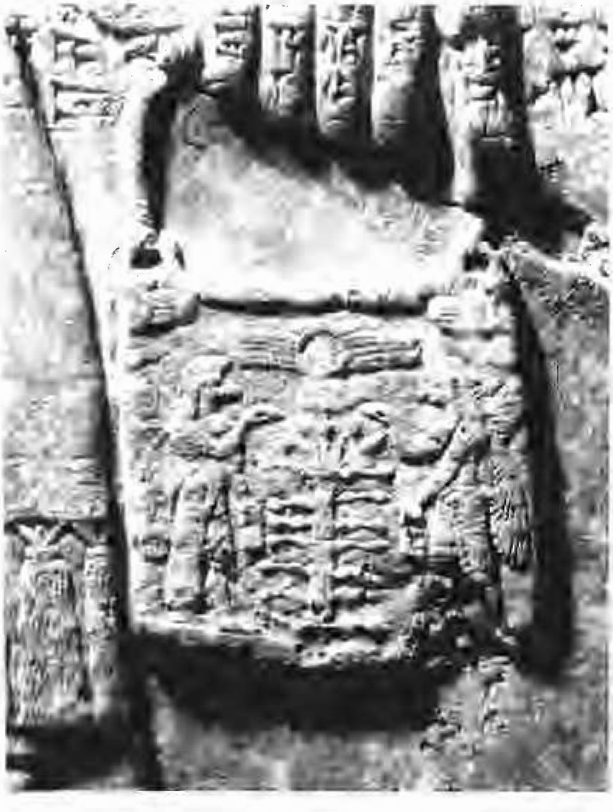


Fig. 14

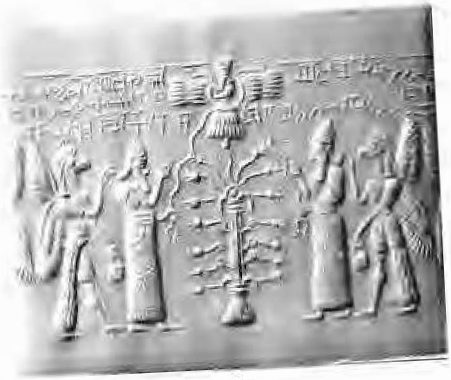


Fig. 15

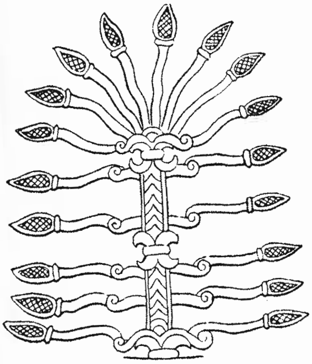


Fig. 16

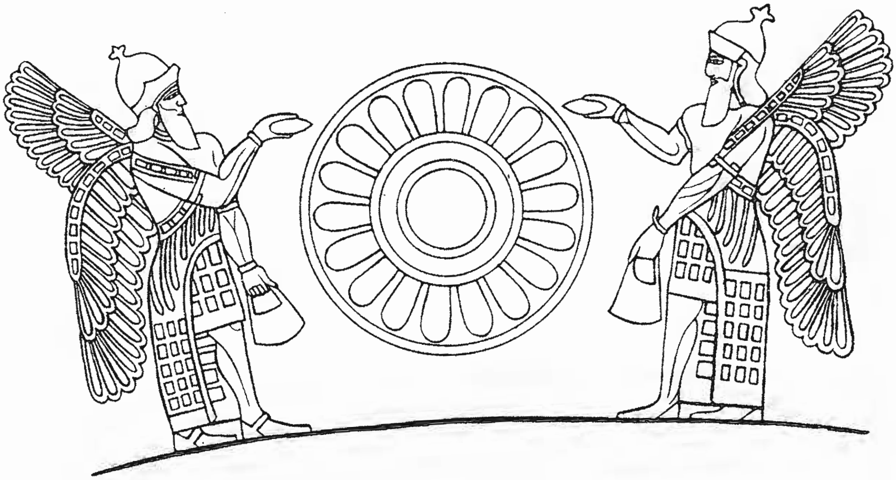
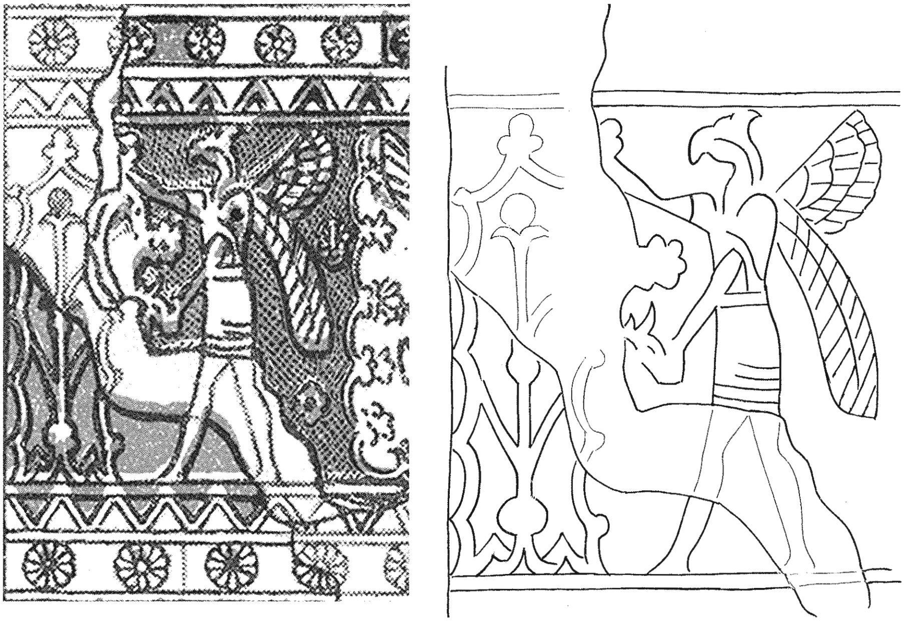


Fig. 17



Detail

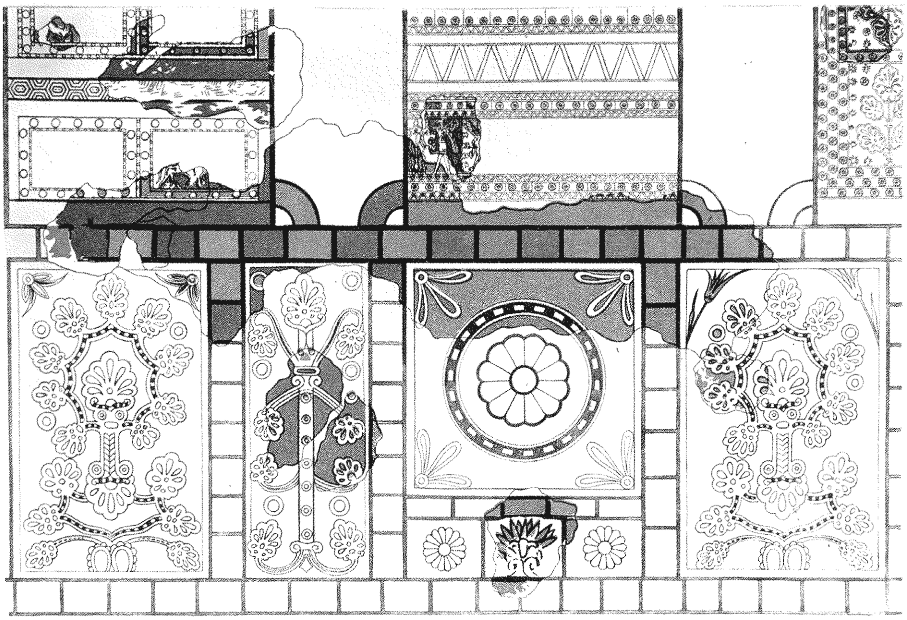


Fig. 18

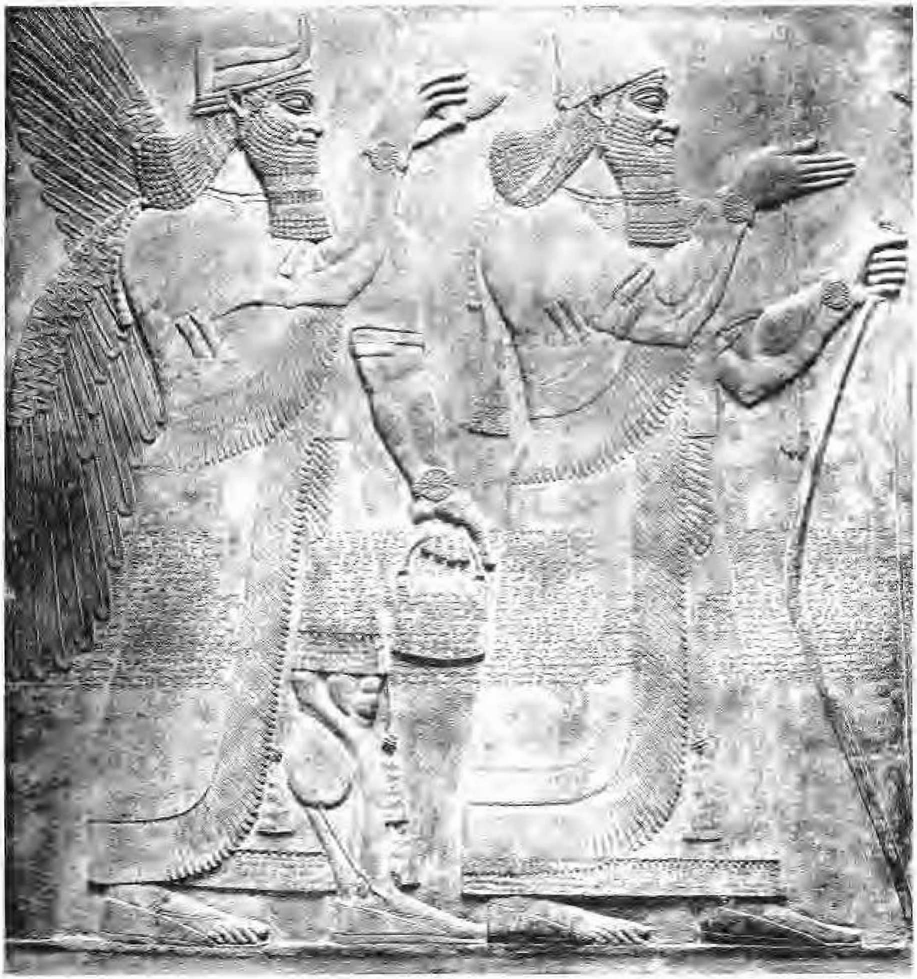


Fig. 19

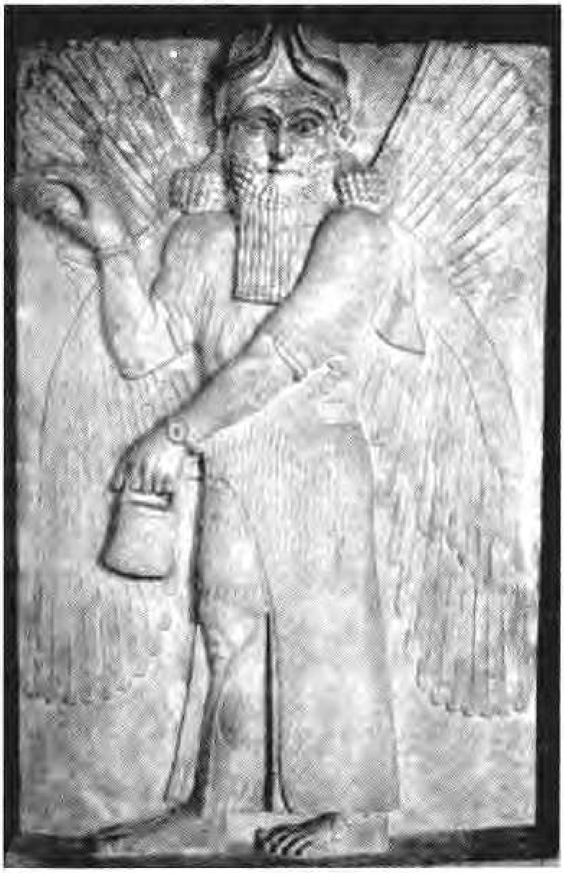


Fig. 20

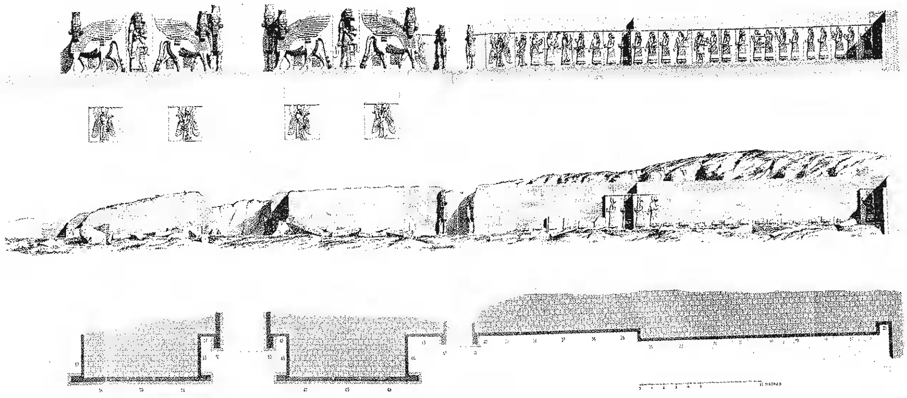


Fig. 21

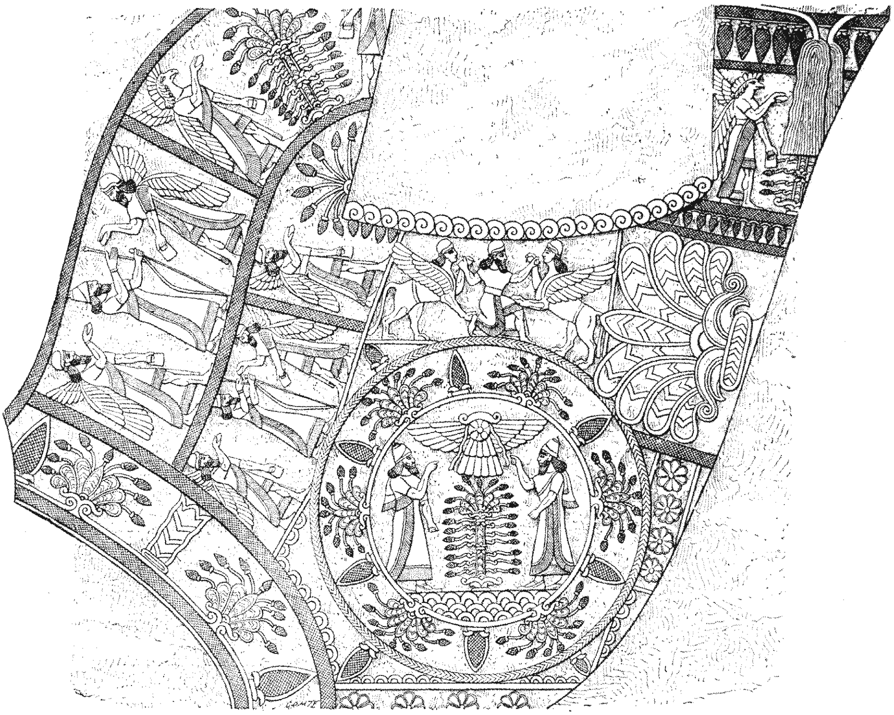


Fig. 22

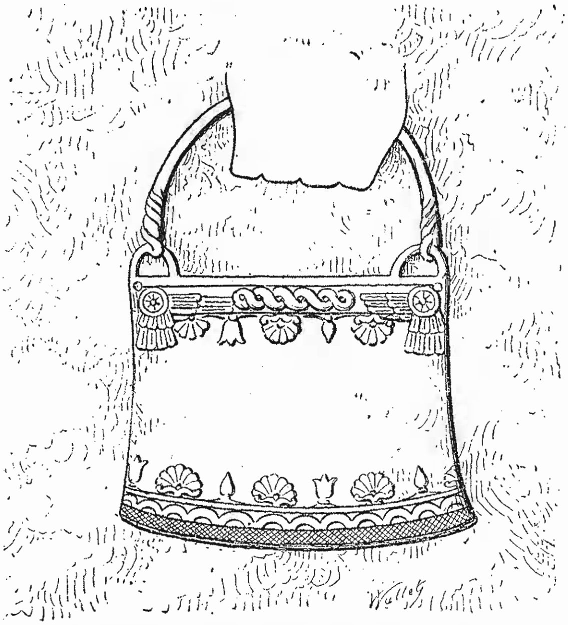


Fig. 23

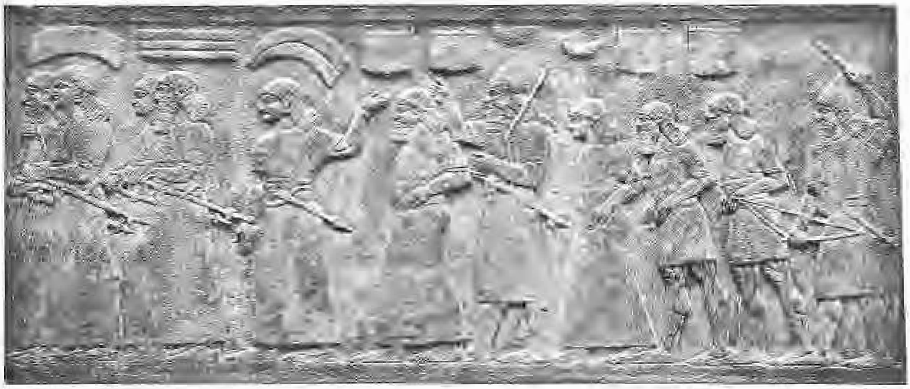


Fig. 24

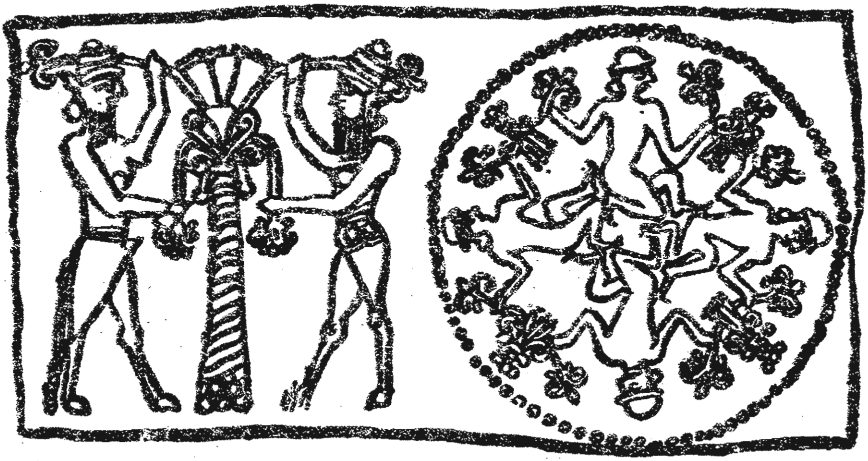


Fig. 25

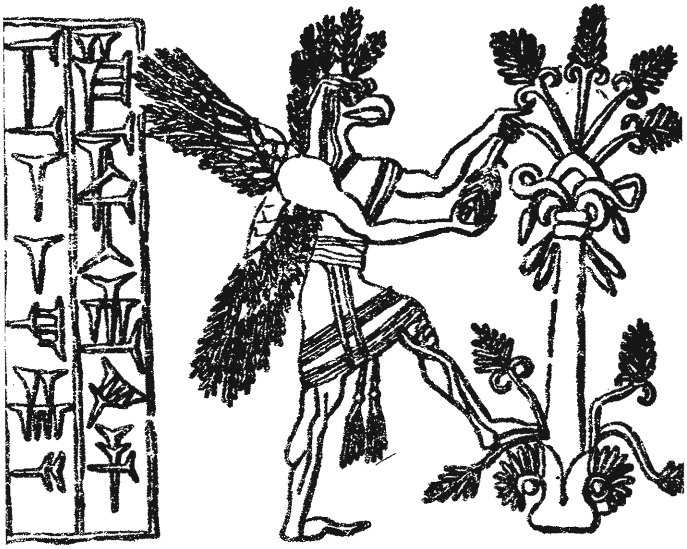


Fig. 26

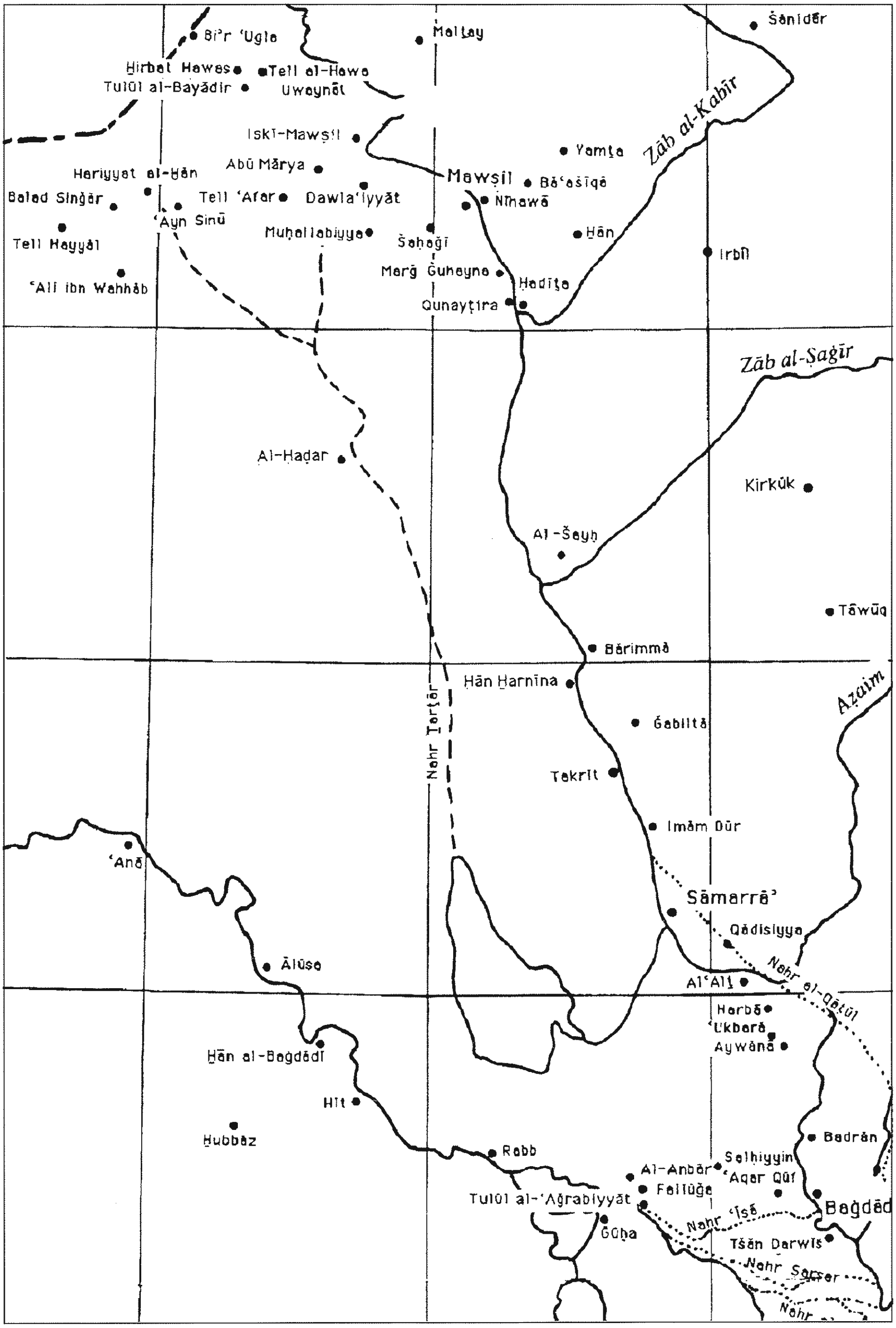

Bi'r 'Ugla
Maltay
Šānidār
Hirbat Hawes
Tell al-Hawa
Tulūl al-Bayādir
Uwaynāt
Iskī-Mawṣil
Yamṭa
Zāb al-Kabīr
Ḥariyyat al-Ḥān
Abū Mārya
Mawṣil
Bā'ašīqā
Balad Sinǧār
Tell 'Afar
Dawla'iyyāt
Nīnawā
'Ayn Sinū
Tell Hayyāl
Muhallabiyya
Ṣahaǧī
Ḫān
Irbīl
'Alī ibn Wahhāb
Marǧ Ǧuhayna
Ḥadīṯa
Qunayṭira
Zāb al-Ṣaġīr
Al-Ḥaḍar
Kirkūk
Al-Šayḫ
Ṭāwūq
Bārimmā
Ḫān Ḥarnīna
Azaim
Ǧabiltā
Nahr Tarṭār
Takrīt
Imām Dūr
'Anā
Sāmarrā'
Qādisiyya
Ālūsa
Al'Alṯ
Nahr al-Qāṭūl
Ḥarbā
'Ukbarā
Ḫān al-Baġdādī
Aywānā
Hīt
Ḥubbāz
Badrān
Rabb
Selhiyyin
Al-Anbār
'Aqar Qūf
Fallūǧa
Tulūl al-'Aǧrabiyyāt
Baġdād
Nahr 'Īsā
Ǧūḥa
Tšān Darwīš
Nahr Ṣarṣer
Nahr

Fig. 27

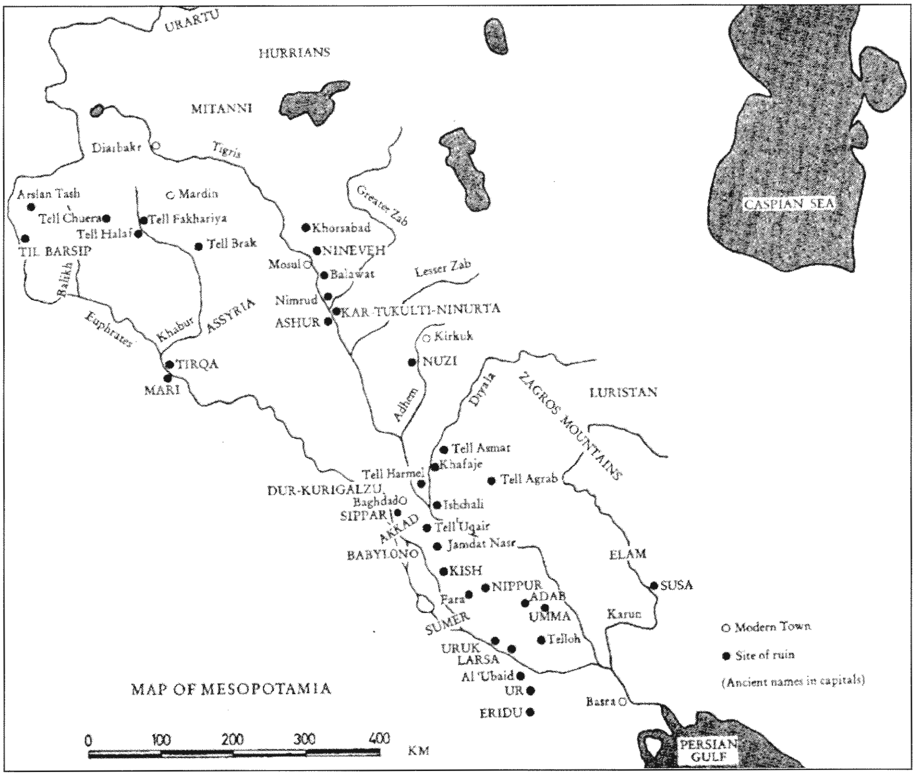

URARTU
HURRIANS
MITANNI
Diarbakr
Tigris
Mardin
Arslan Tash
Tell Chuera
Tell Fakhariya
Tell Halaf
Tell Brak
TIL BARSIP
Balikh
Euphrates
Khabur
ASSYRIA
Greater Zab
Khorsabad
NINEVEH
Mosul
Balawat
Lesser Zab
Nimrud
KAR-TUKULTI-NINURTA
ASHUR
Kirkuk
NUZI
TIRQA
MARI
Adhem
Diyala
ZAGROS MOUNTAINS
LURISTAN
Tell Asmar
Khafaje
Tell Harmel
Tell Agrab
DUR-KURIGALZU
Baghdad
SIPPAR
Ishchali
AKKAD
Tell 'Uqair
Jamdat Nasr
BABYLON
KISH
NIPPUR
Fara
ADAB
UMMA
ELAM
SUSA
Karun
SUMER
Telloh
URUK
LARSA
Al 'Ubaid
UR
ERIDU
Basra
PERSIAN GULF
CASPIAN SEA
MAP OF MESOPOTAMIA
0
100
200
300
400
KM
○ Modern Town
● Site of ruin
(Ancient names in capitals)

Fig. 28

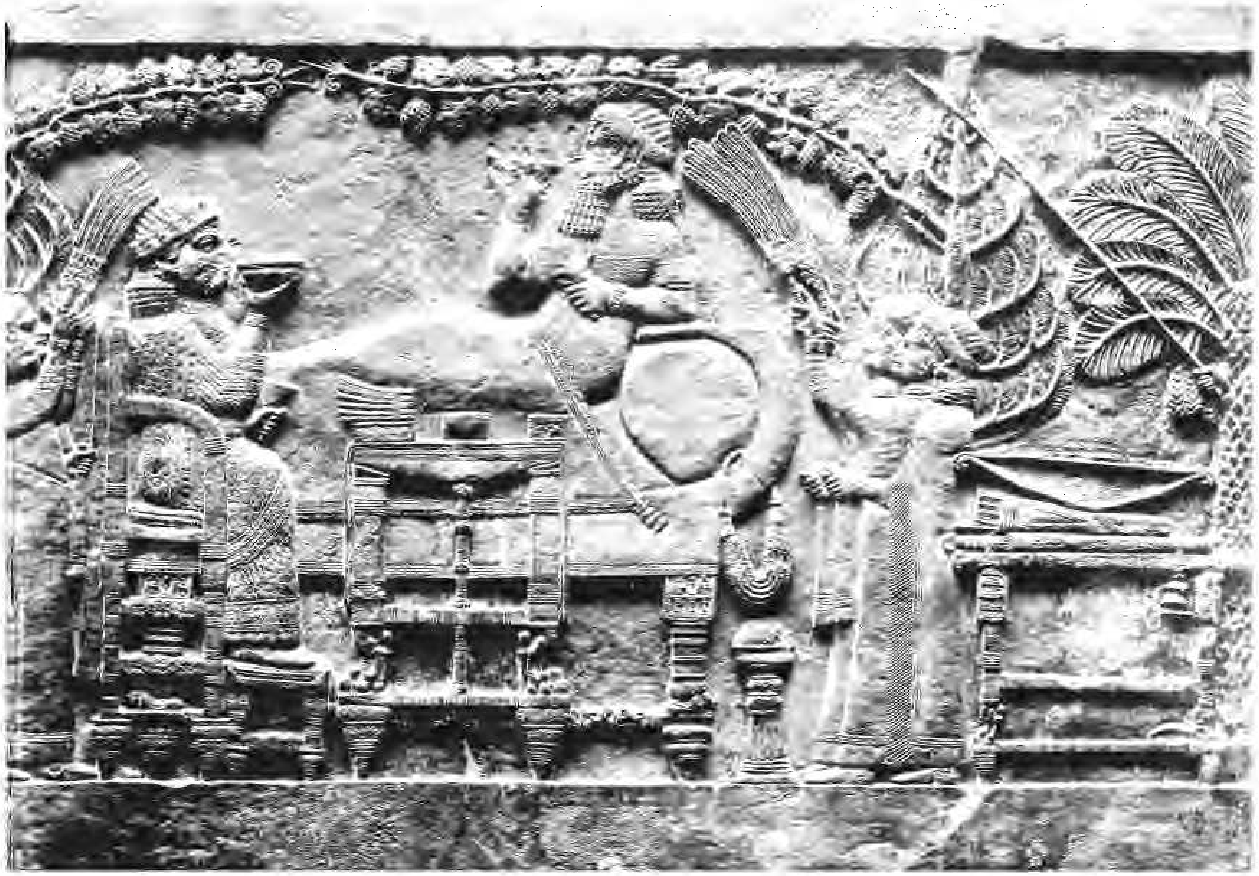


Fig. 29

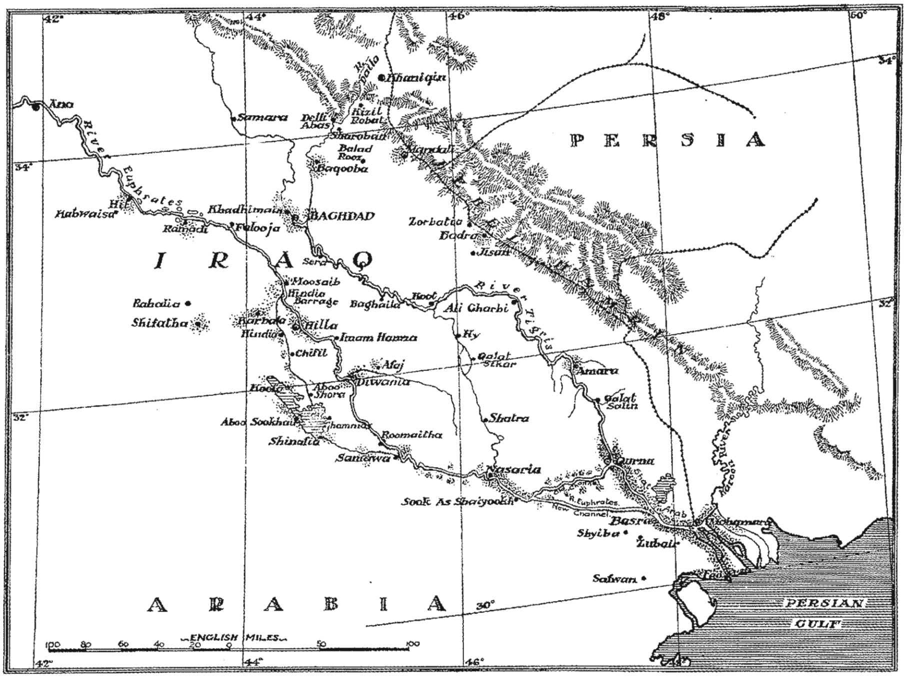

42°
44°
46°
48°
50°
34°
32°
30°
Ana
River Euphrates
Hit
Kabwaisa
Ramadi
Falooja
Khadhimain
BAGHDAD
Samara
Delli Abas
Kizil Robat
Shahraban
Balad Roor
Baqooba
R. Diyala
Khaniqin
Mandali
Zorbatia
Badra
Jisan
P E R S I A
I R A Q
Sera
Moosaib
Hindia Barrage
Baghaila
Kool
Ali Gharbi
River Tigris
Rahalia
Shitatha
Karbala
Hilla
Hindia
Imam Hamza
Chifil
Afaj
Hy
Qalat Sikar
Amara
Kufa
Aboo Shora
Diwania
Qalat Saleh
Shatra
Aboo Sookhair
Shamnia
Shinafia
Roomaitha
Samawa
Nasaria
Qurna
Shat el Arab
Old R. Euphrates
New Channel
Sook As Shaiyookh
Basra
Mohammara
Karoon River
Shyiba
Zubair
Fao
Safwan
A R A B I A
PERSIAN GULF
ENGLISH MILES
100
80
60
40
20
0
50
100

Fig. 30

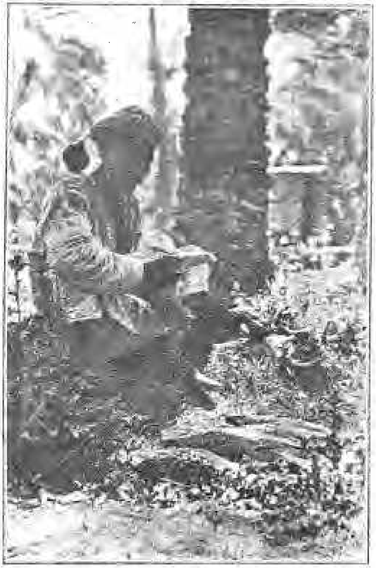


Fig. 31

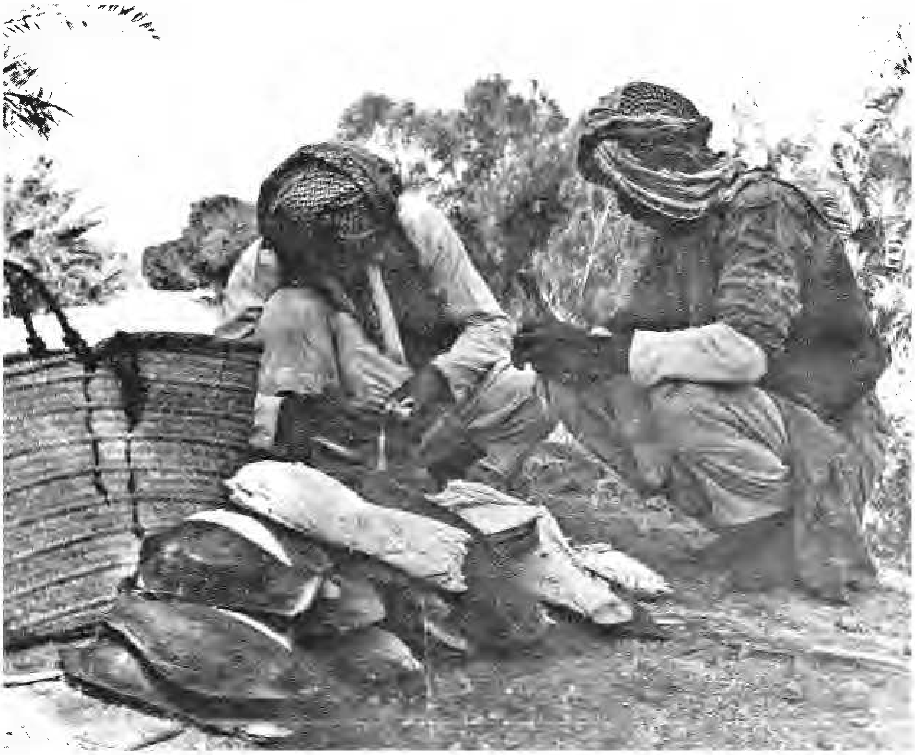


Fig. 32

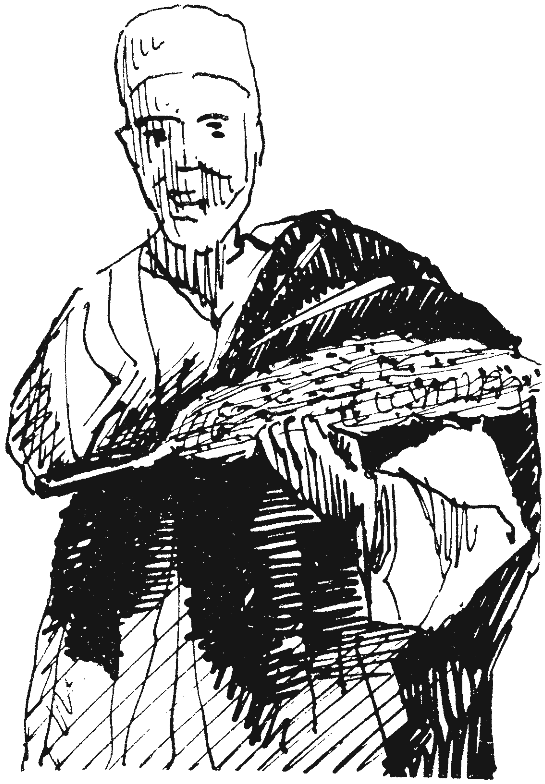


Fig. 33

Fig. 34

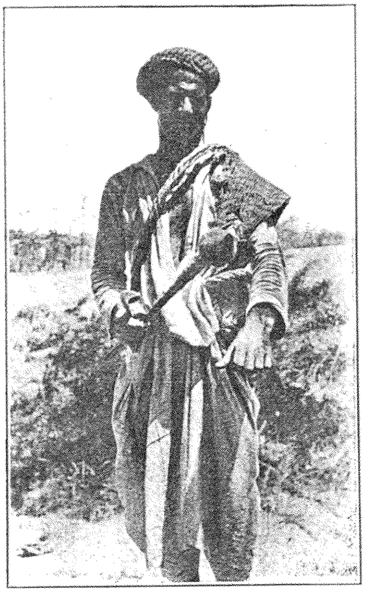


Fig. 35

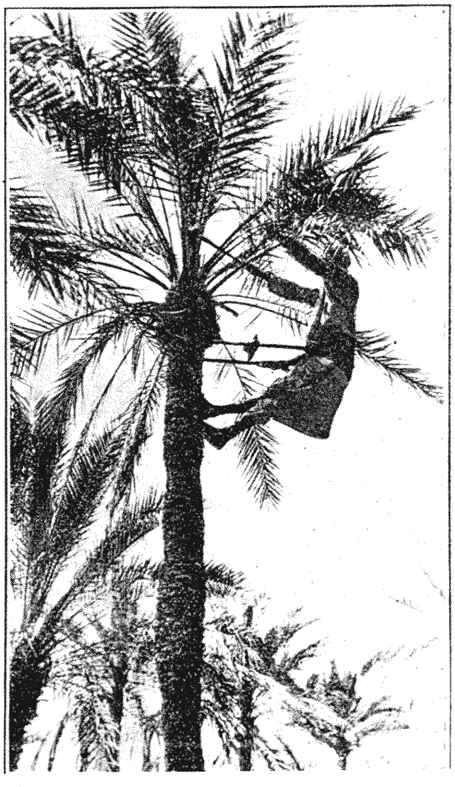


Fig. 36

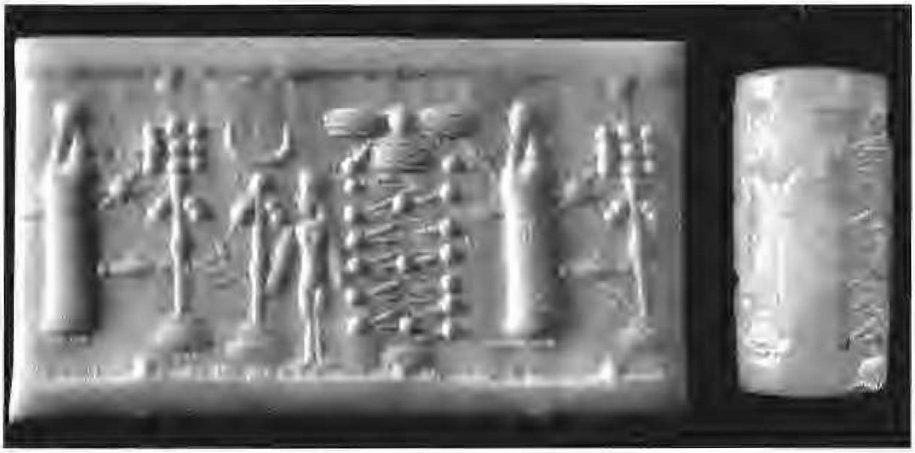


Fig. 37

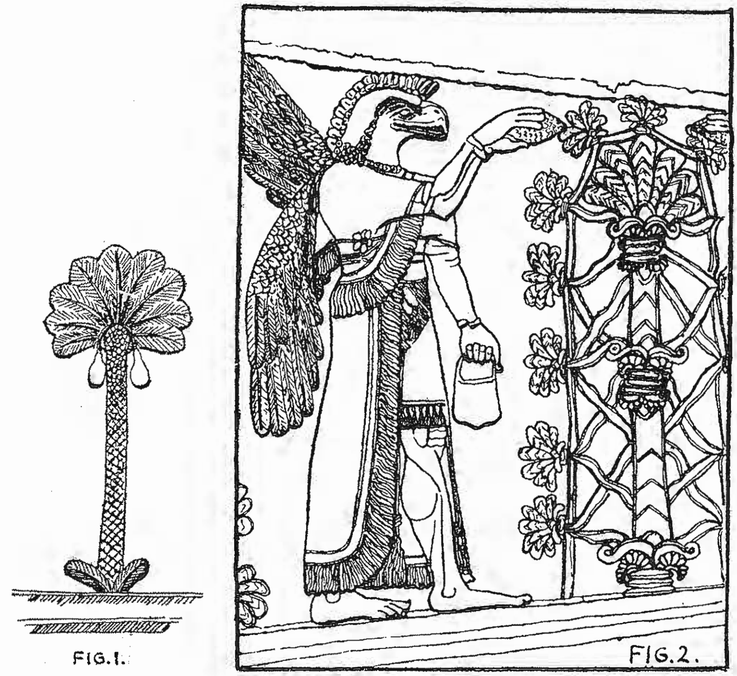


FIG.1.

FIG.2.

Fig. 38

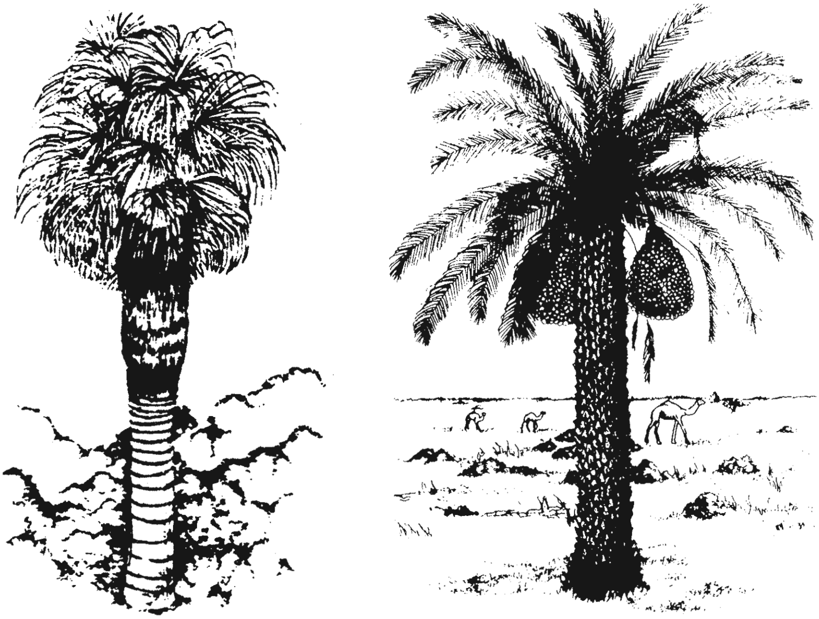


Fig. 39

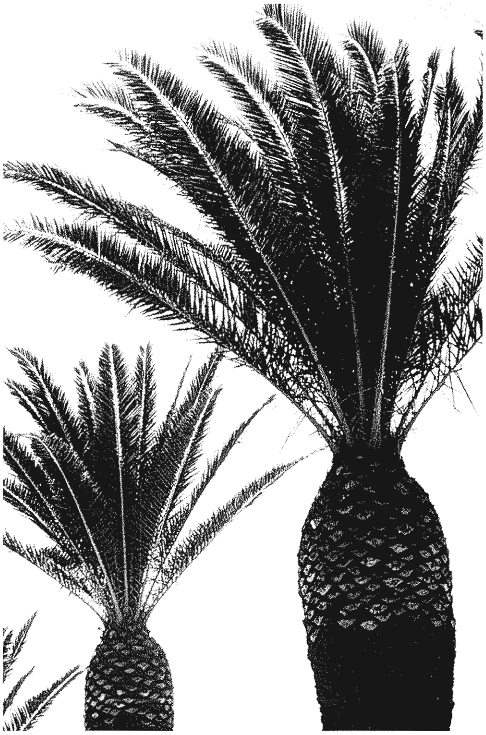


Fig. 40

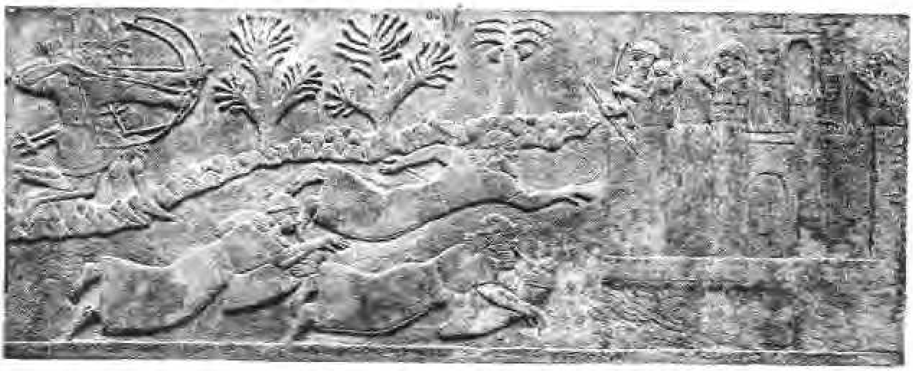


Fig. 41

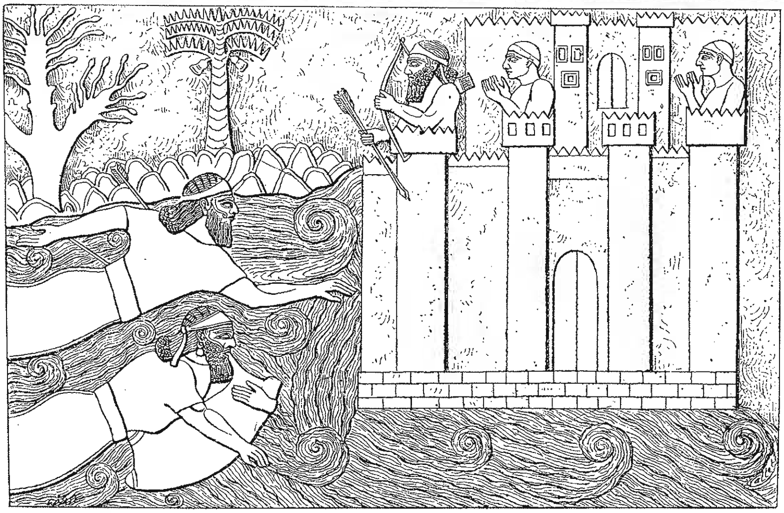


Fig. 42

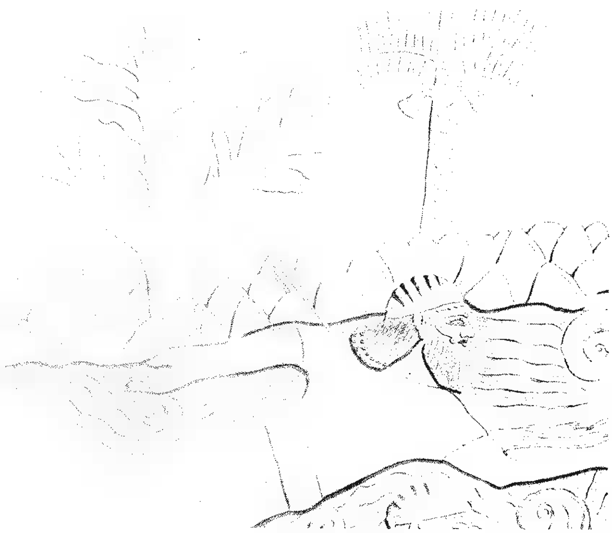


Fig. 42
detail

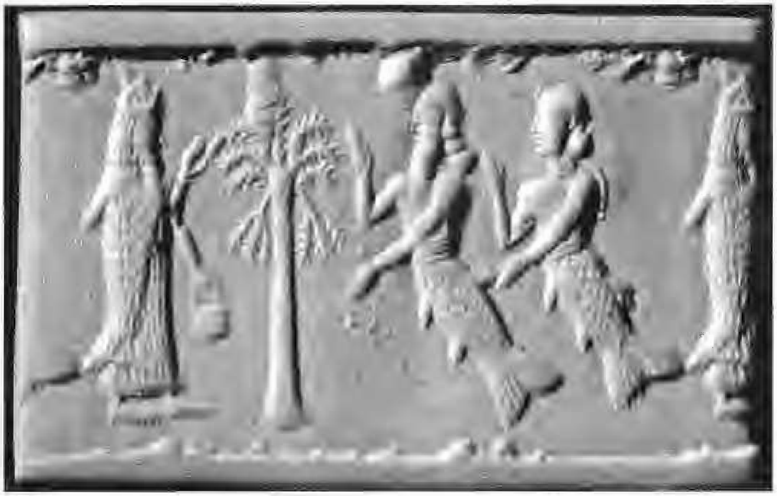


Fig. 43

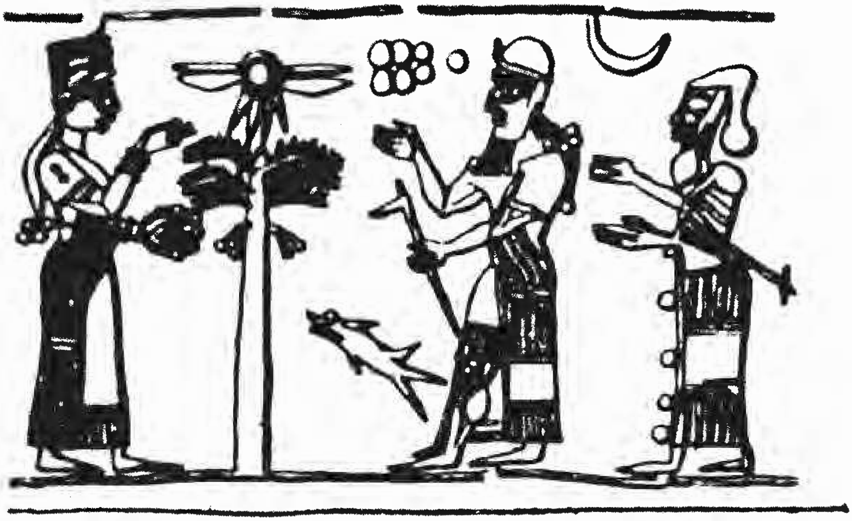


Fig. 44

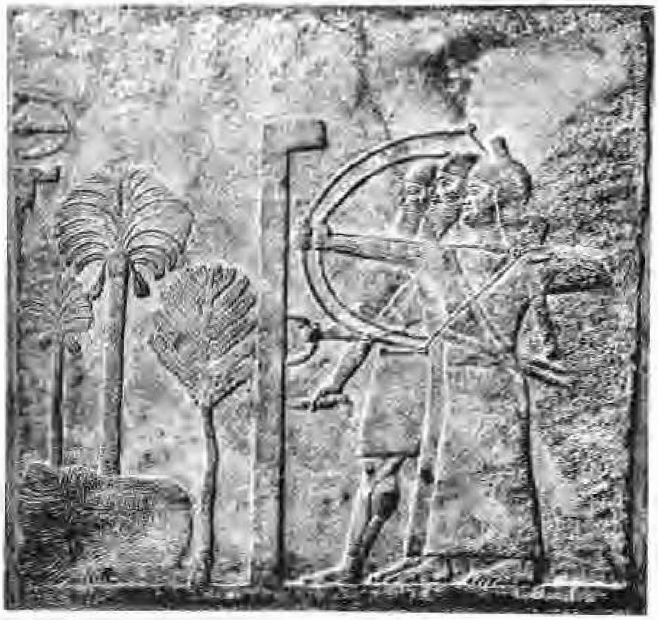


Fig. 45

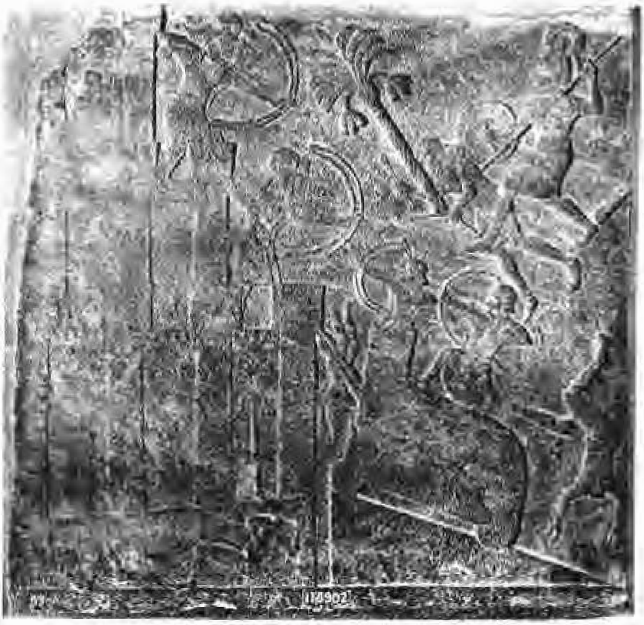


Fig. 46

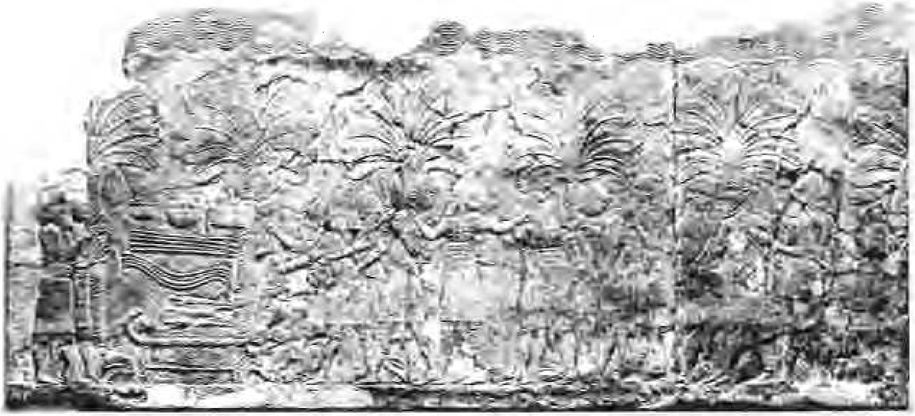


Fig. 47

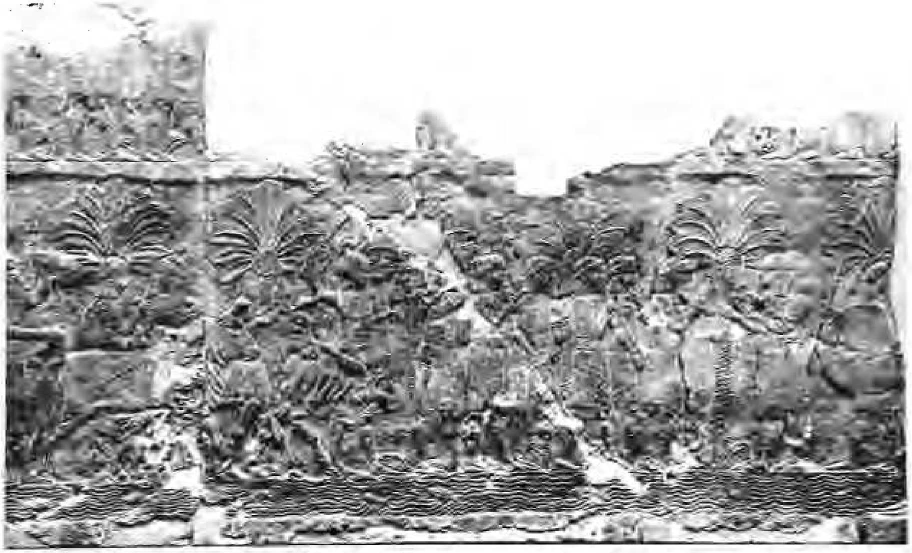


Fig. 48

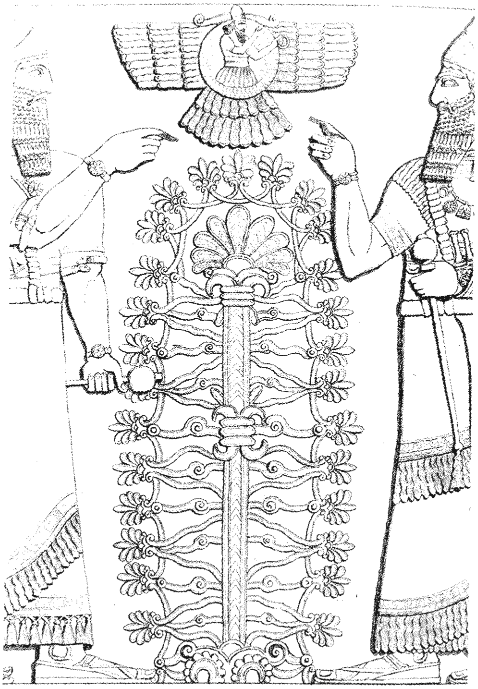


Fig. 49

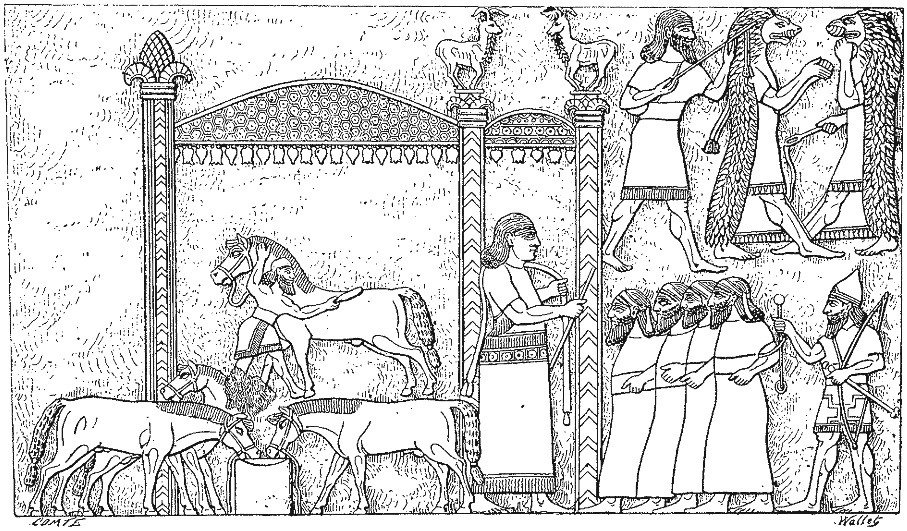

COMTE
Wallet

Fig. 50

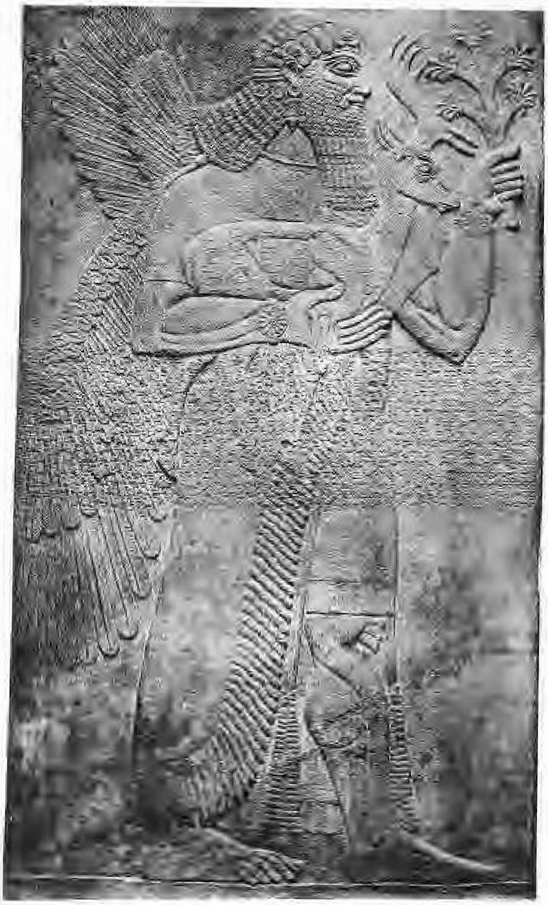


Fig. 51

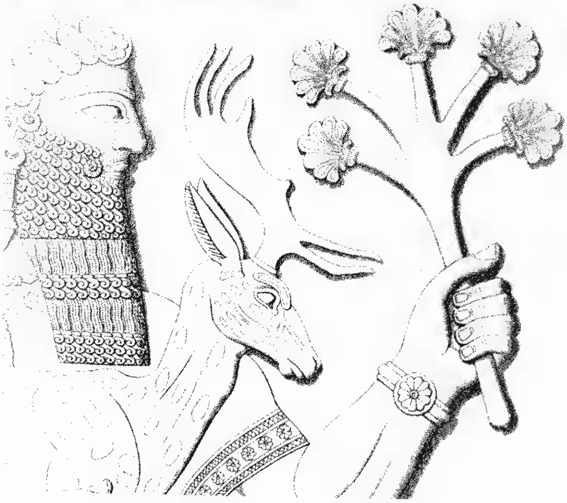


Fig. 52

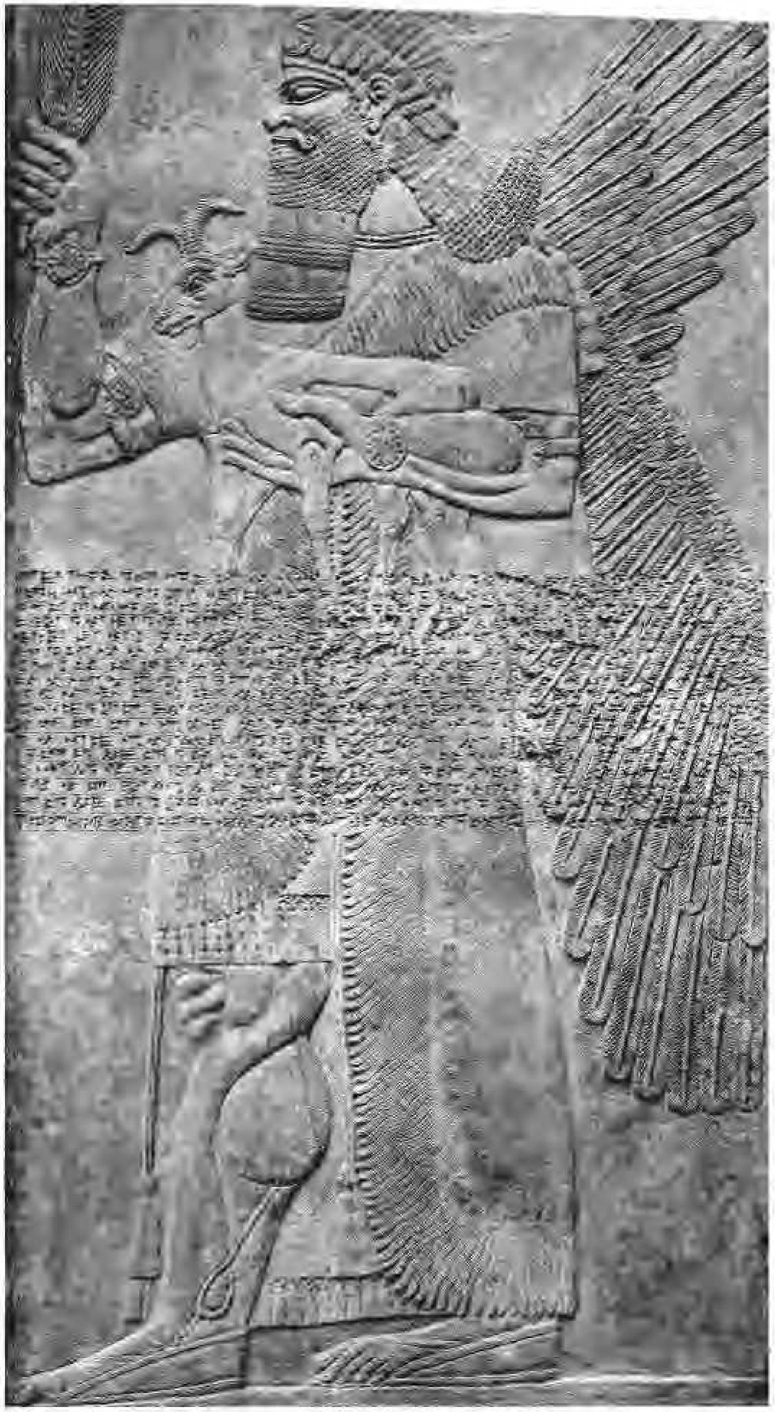


Fig. 53

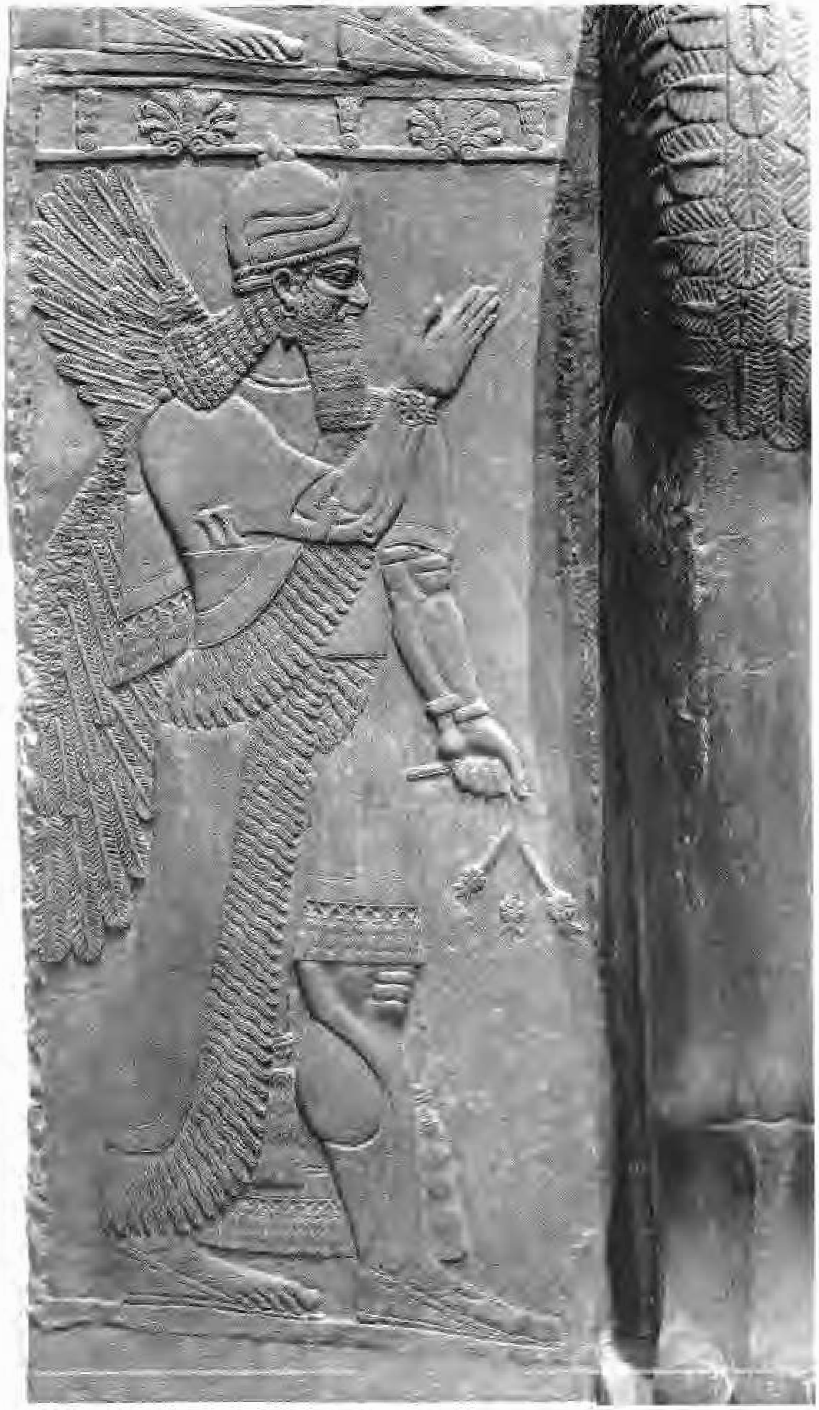


Fig. 54

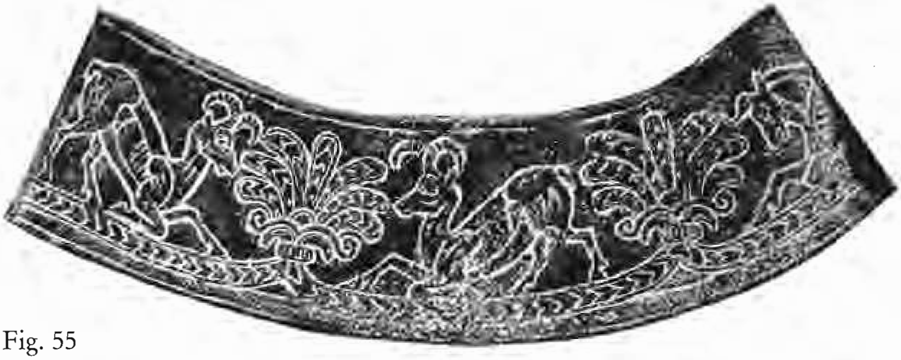


Fig. 55

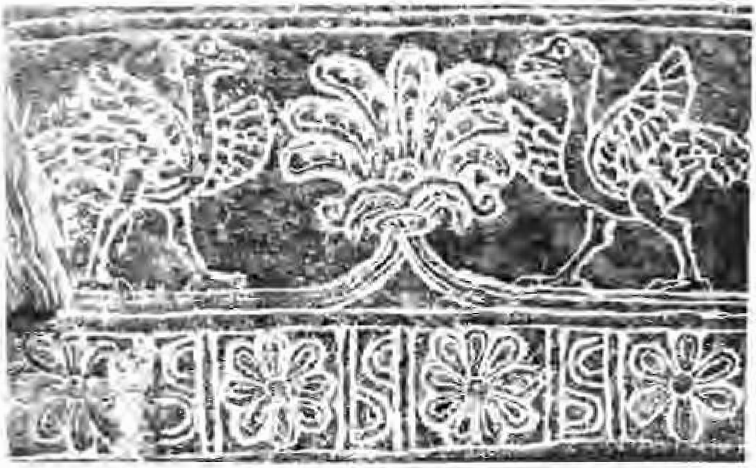


Fig. 56

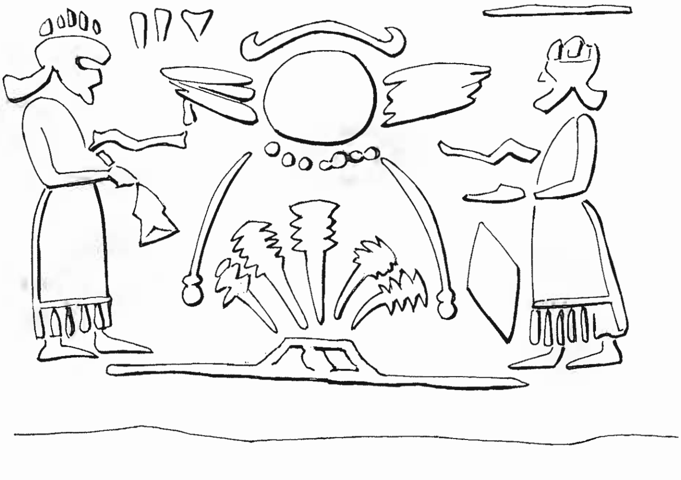


Fig. 57

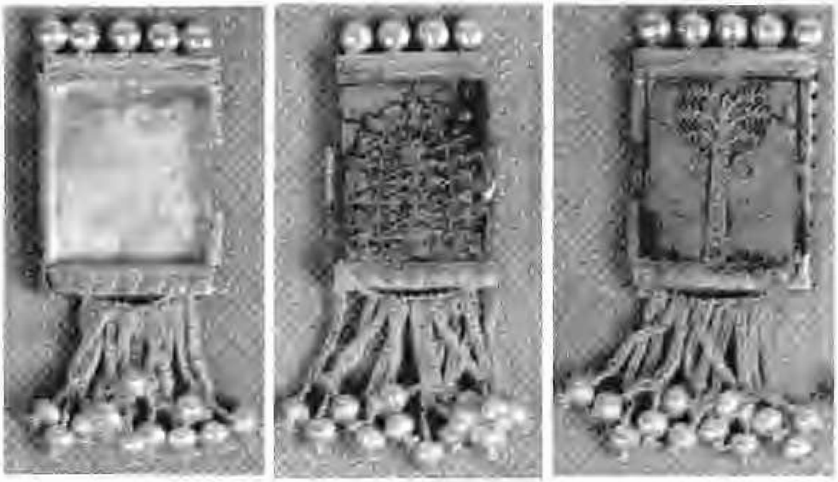


Fig. 58

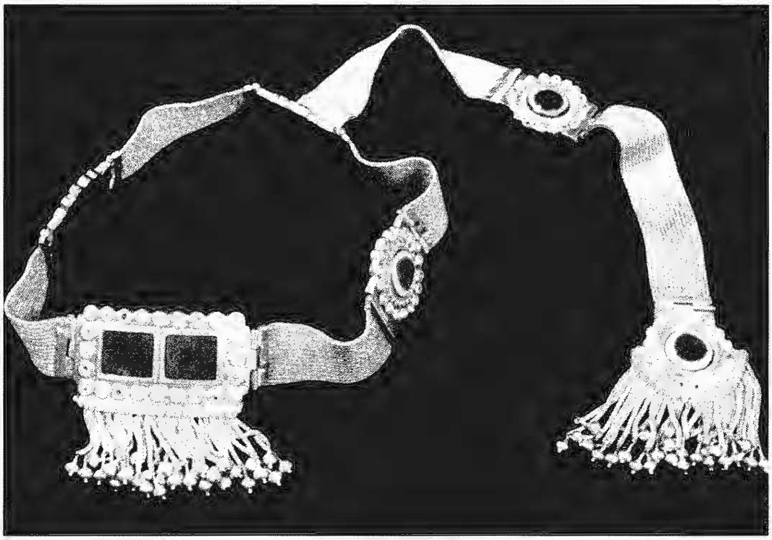


Fig. 59

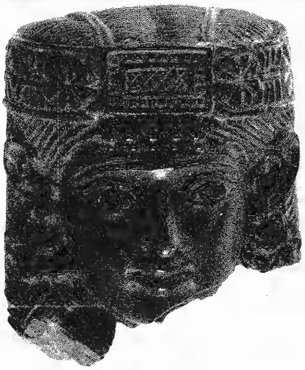


Fig. 60

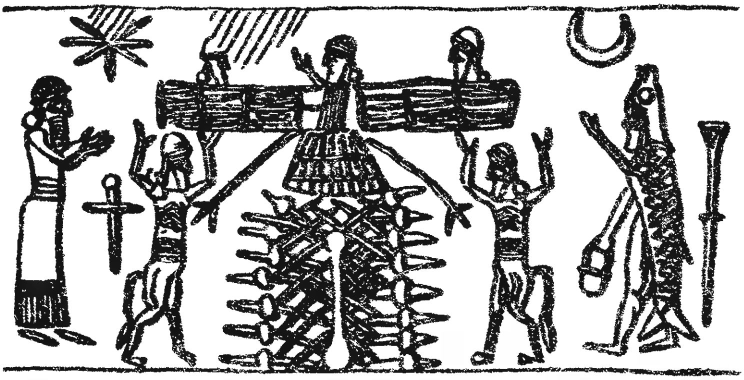


Fig. 61

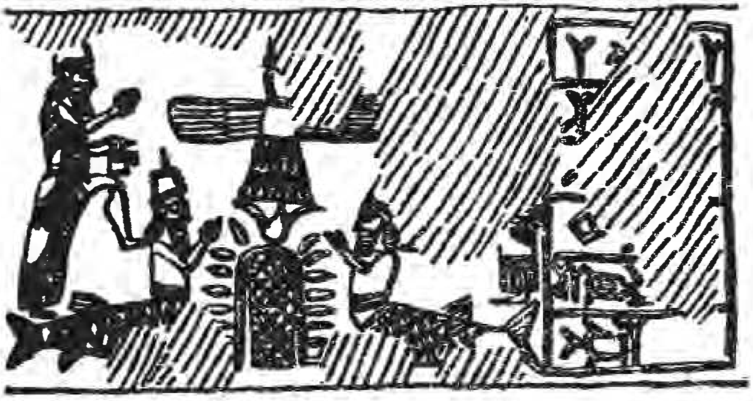


Fig. 62

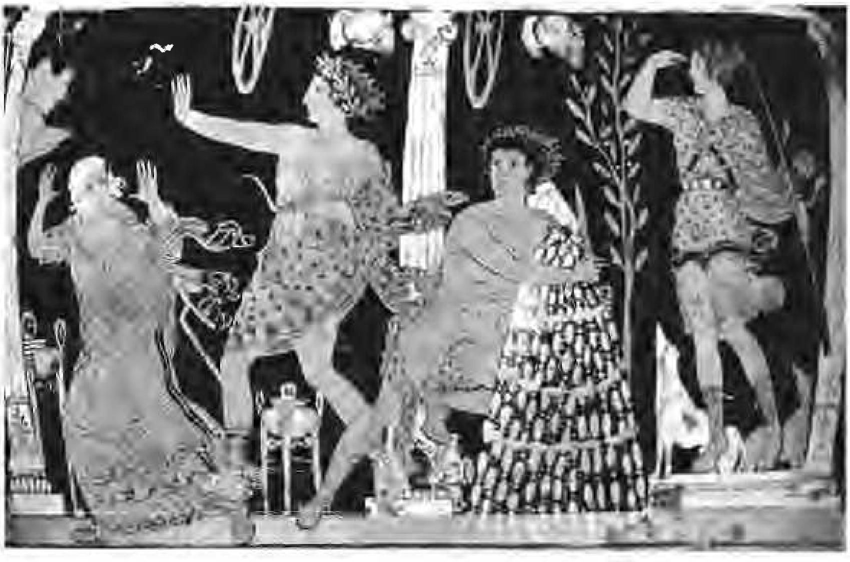


Fig. 63

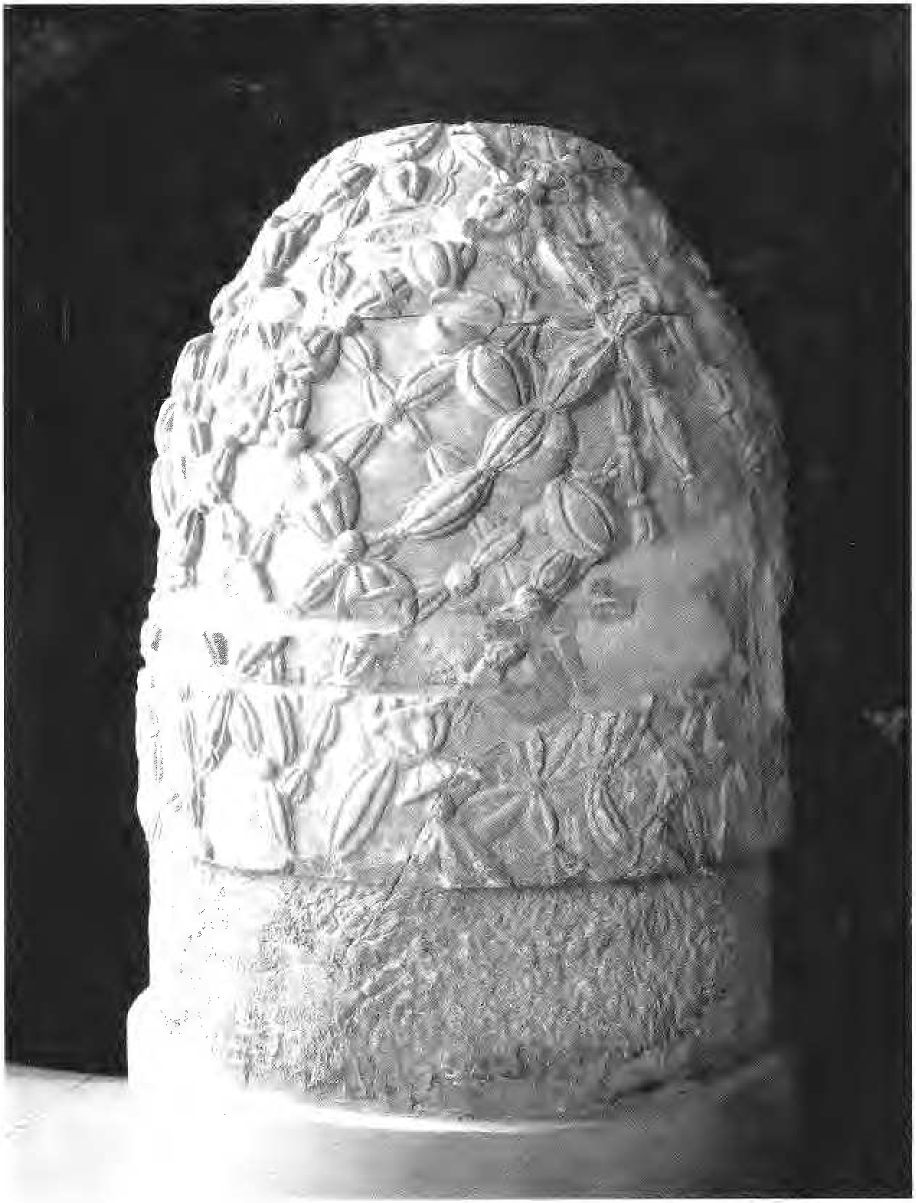


Fig. 64

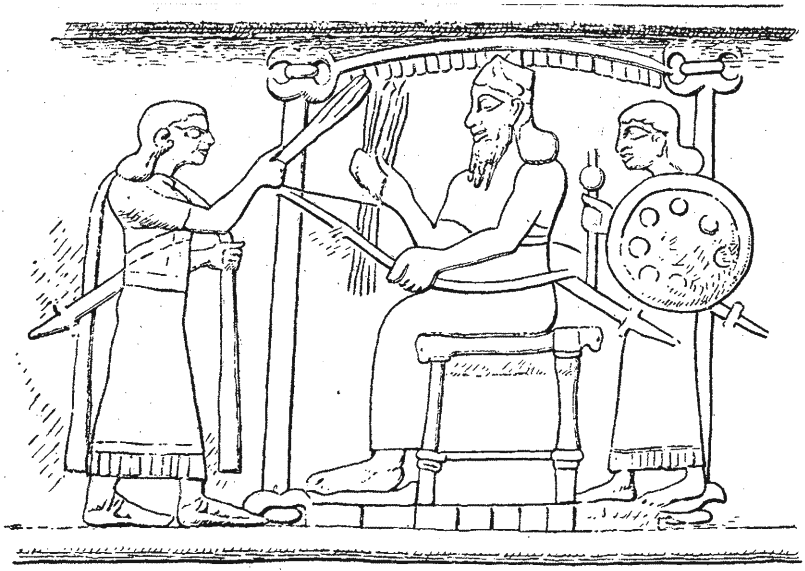


Fig. 65

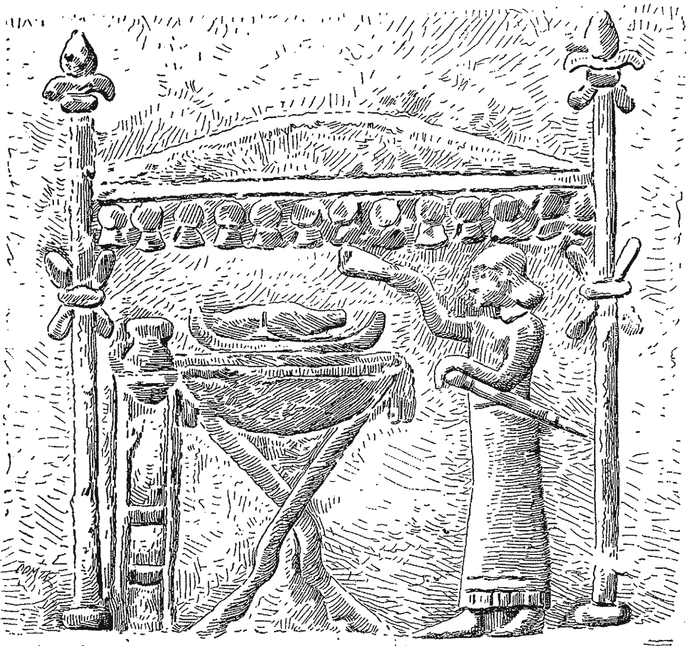


Fig. 66

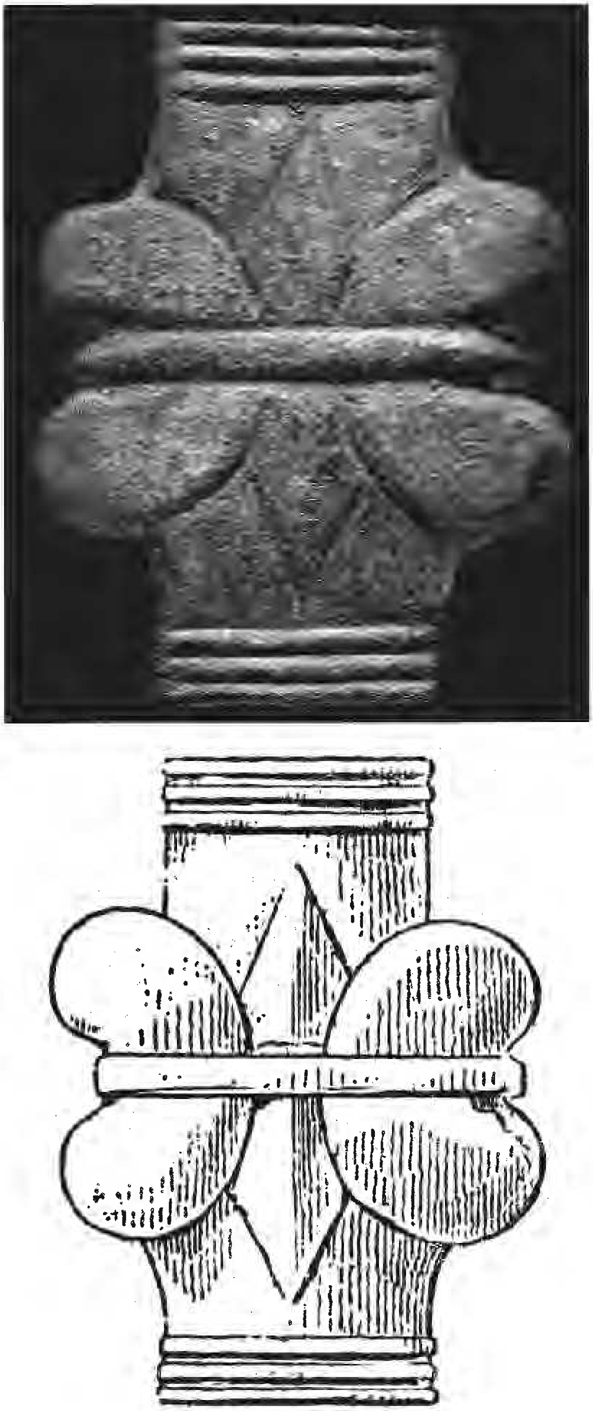


Fig. 67

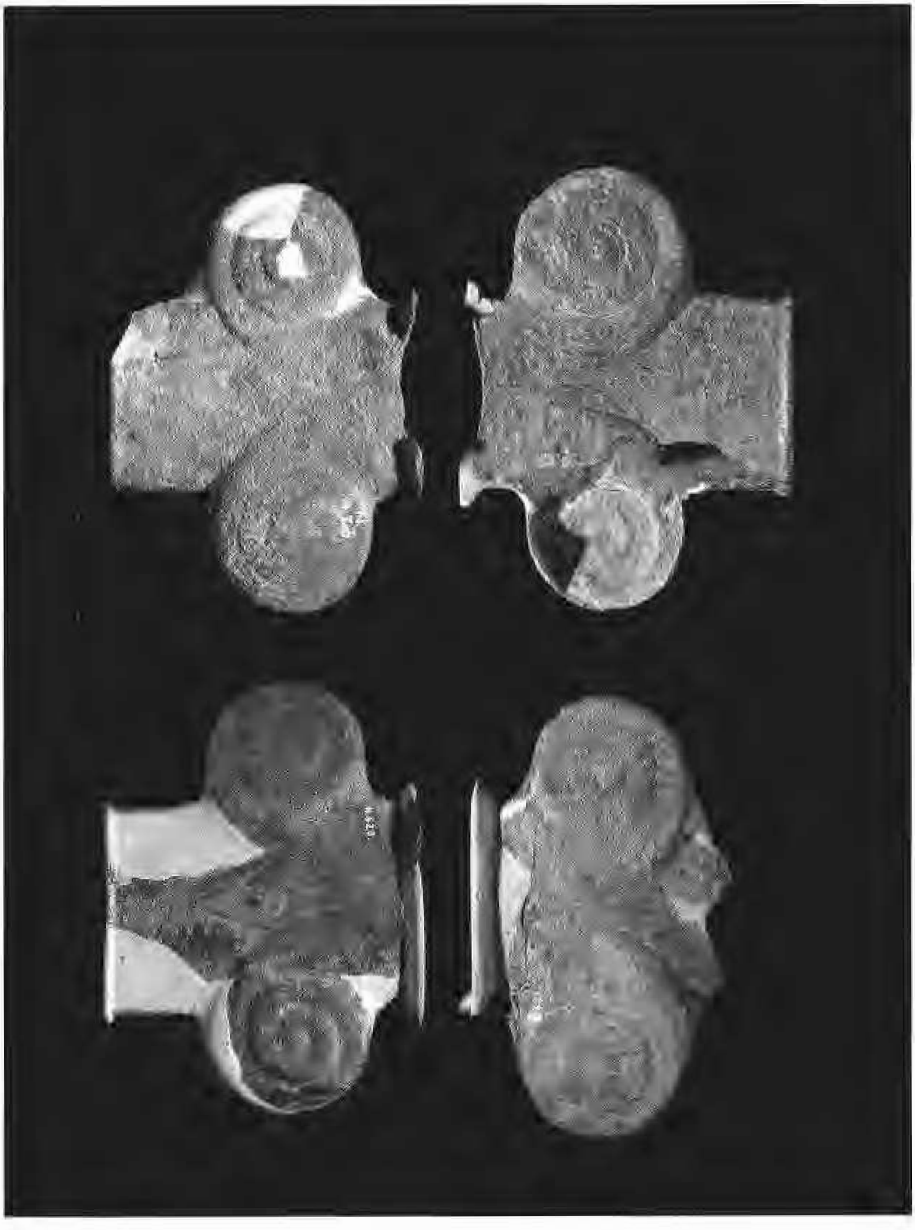


Fig. 68

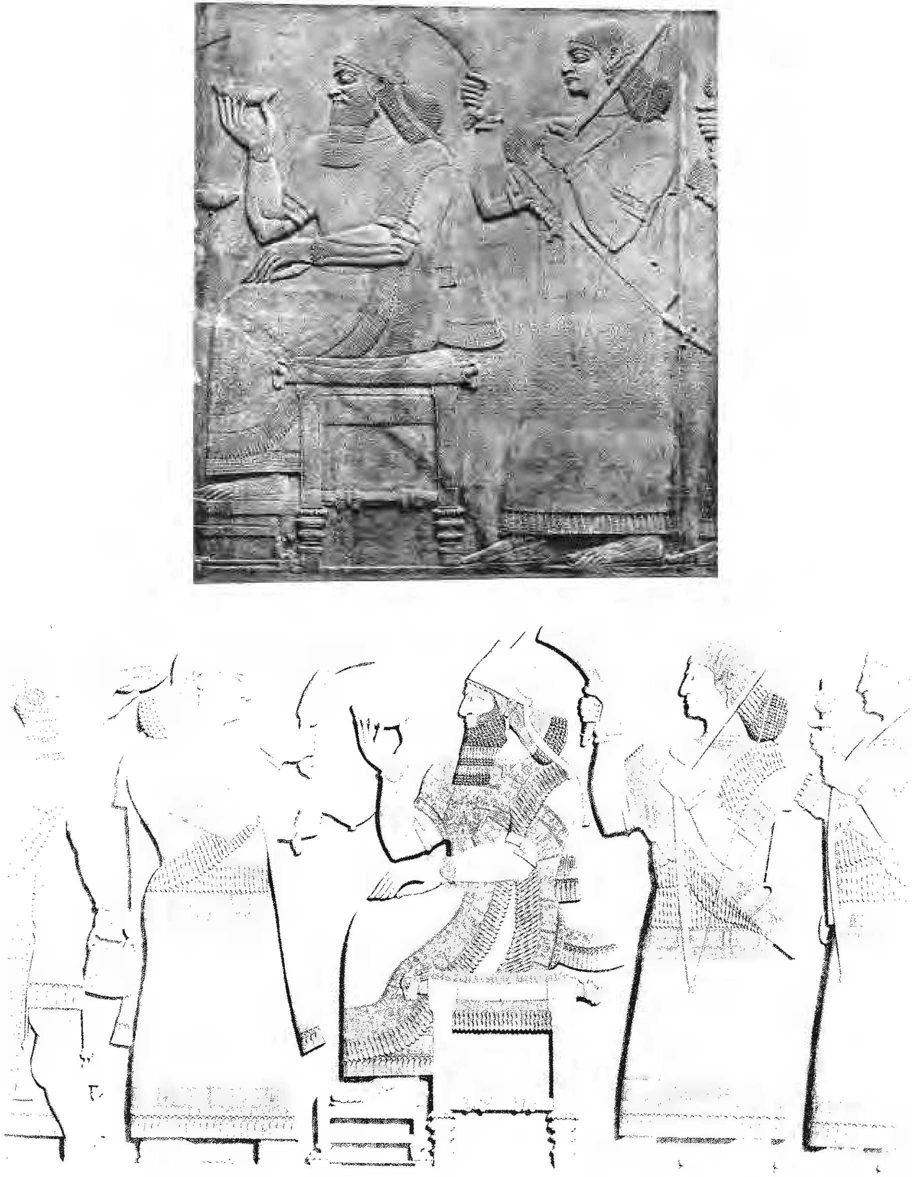


Fig. 69a

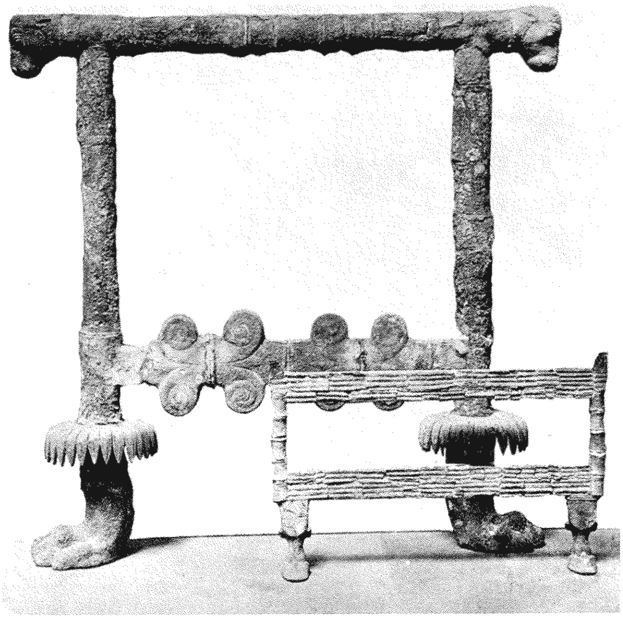


Fig. 69b

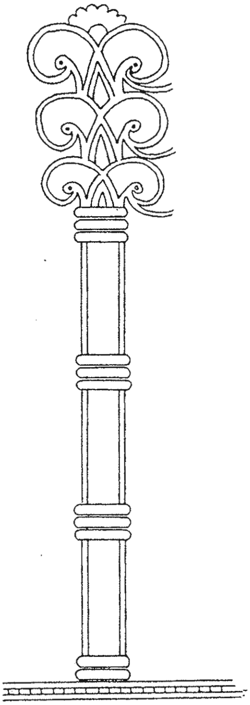


Fig. 70

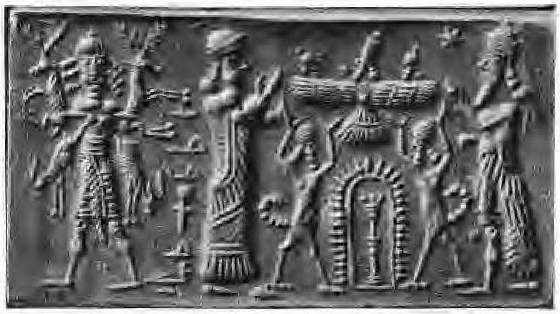
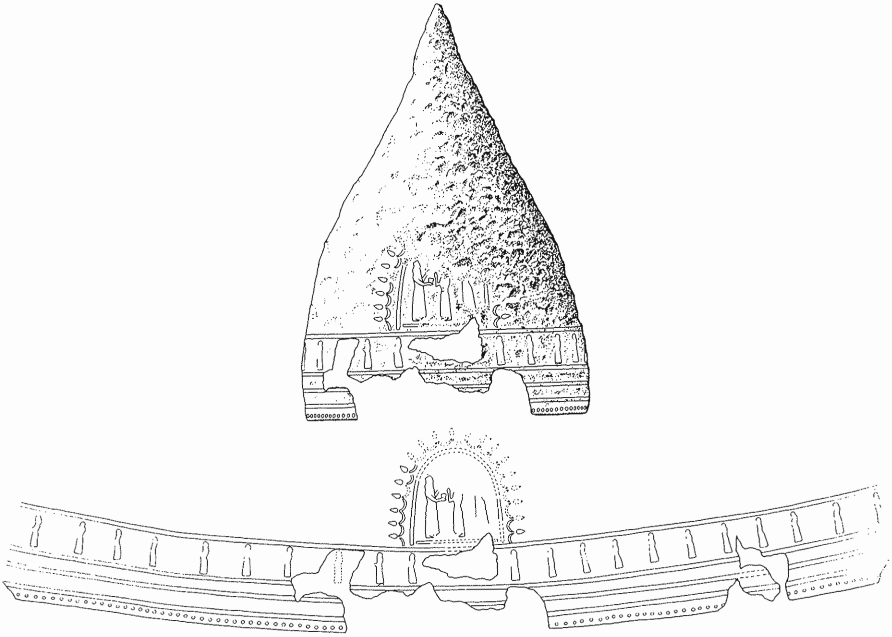


Fig. 71



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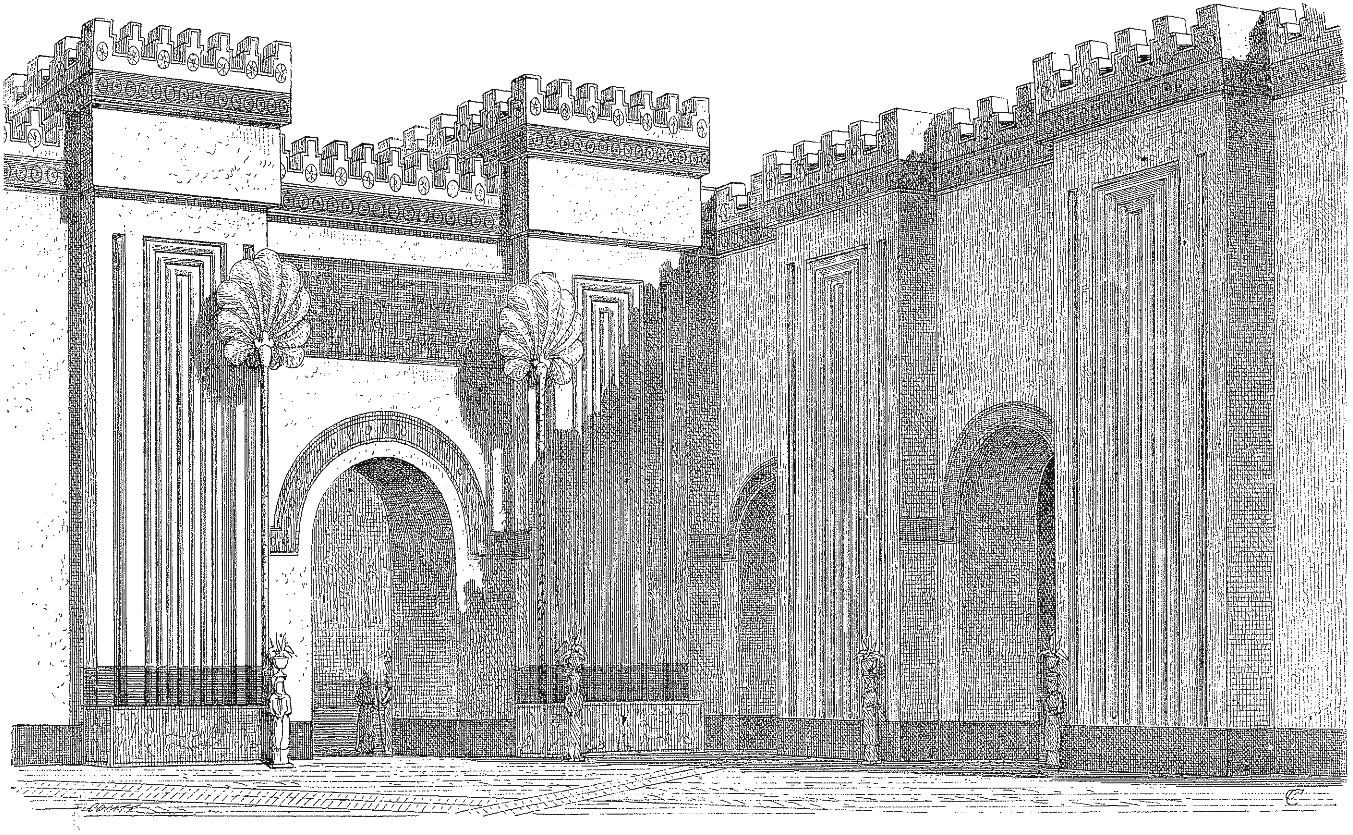

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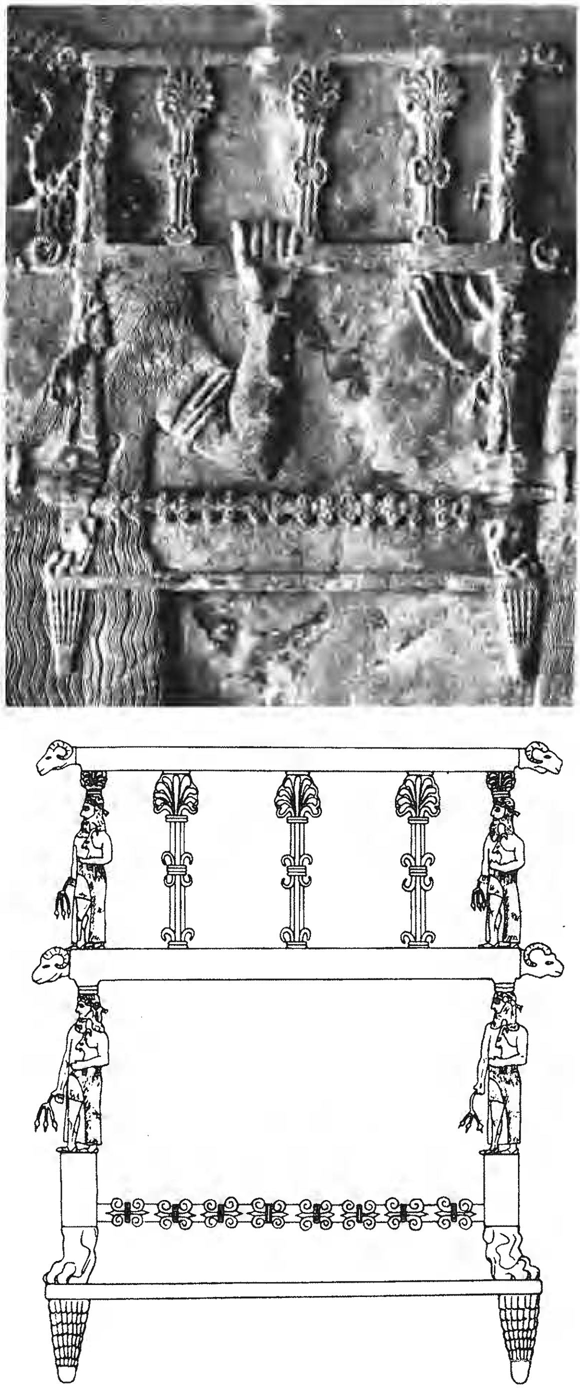

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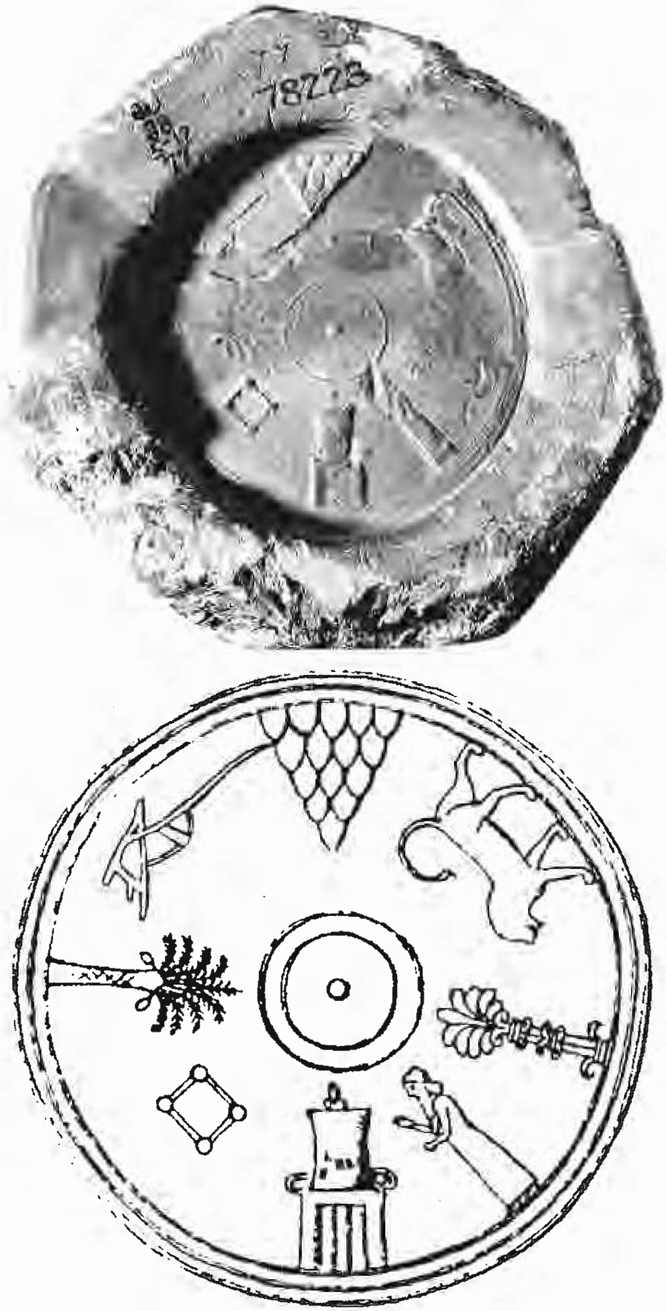

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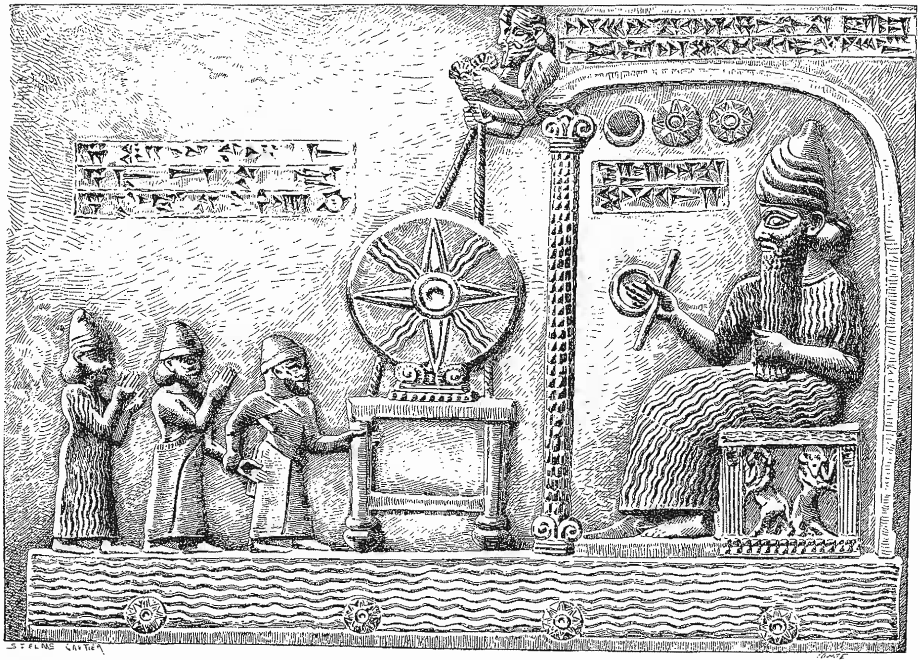

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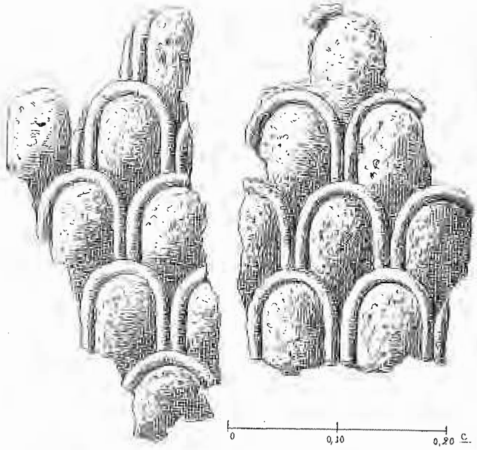

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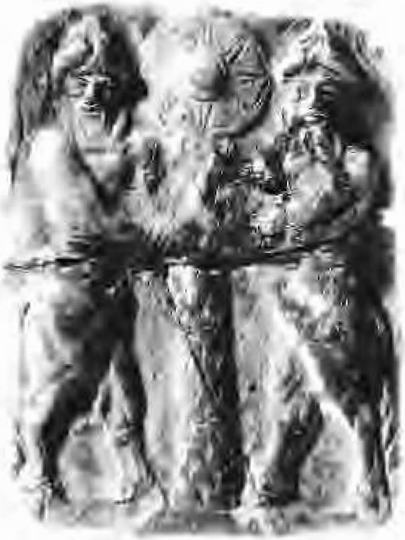

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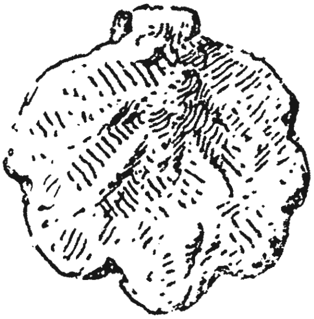

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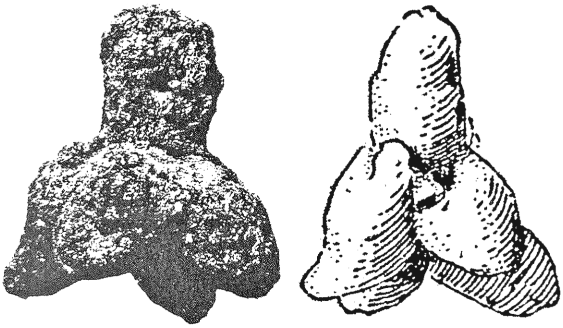

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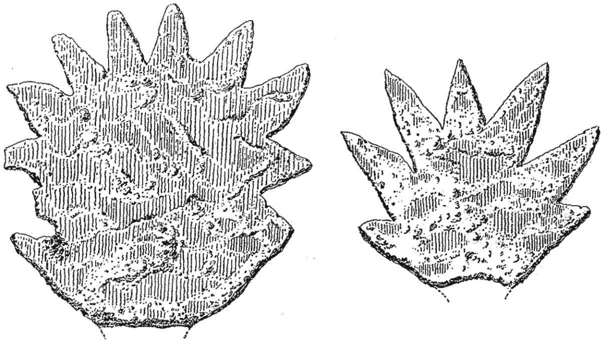

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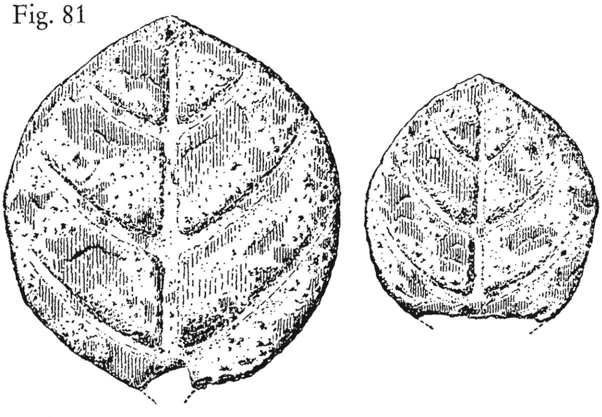

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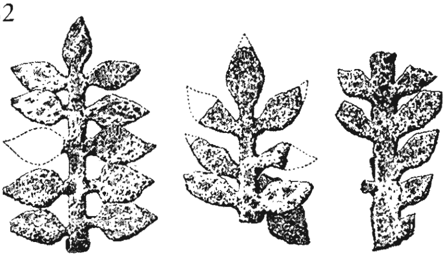

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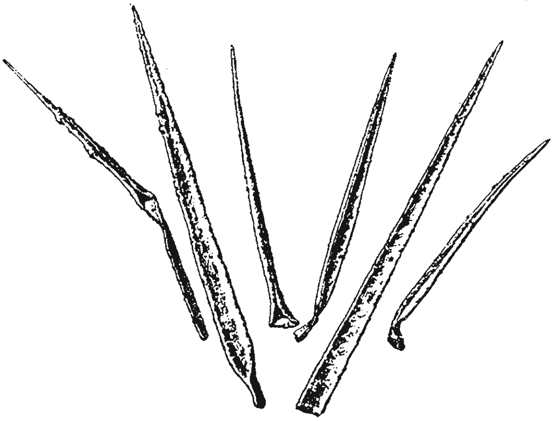

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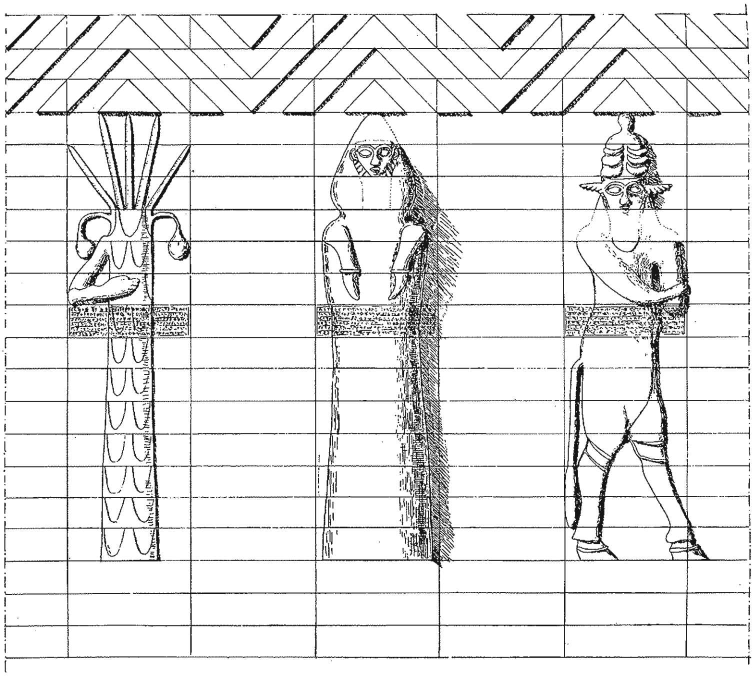

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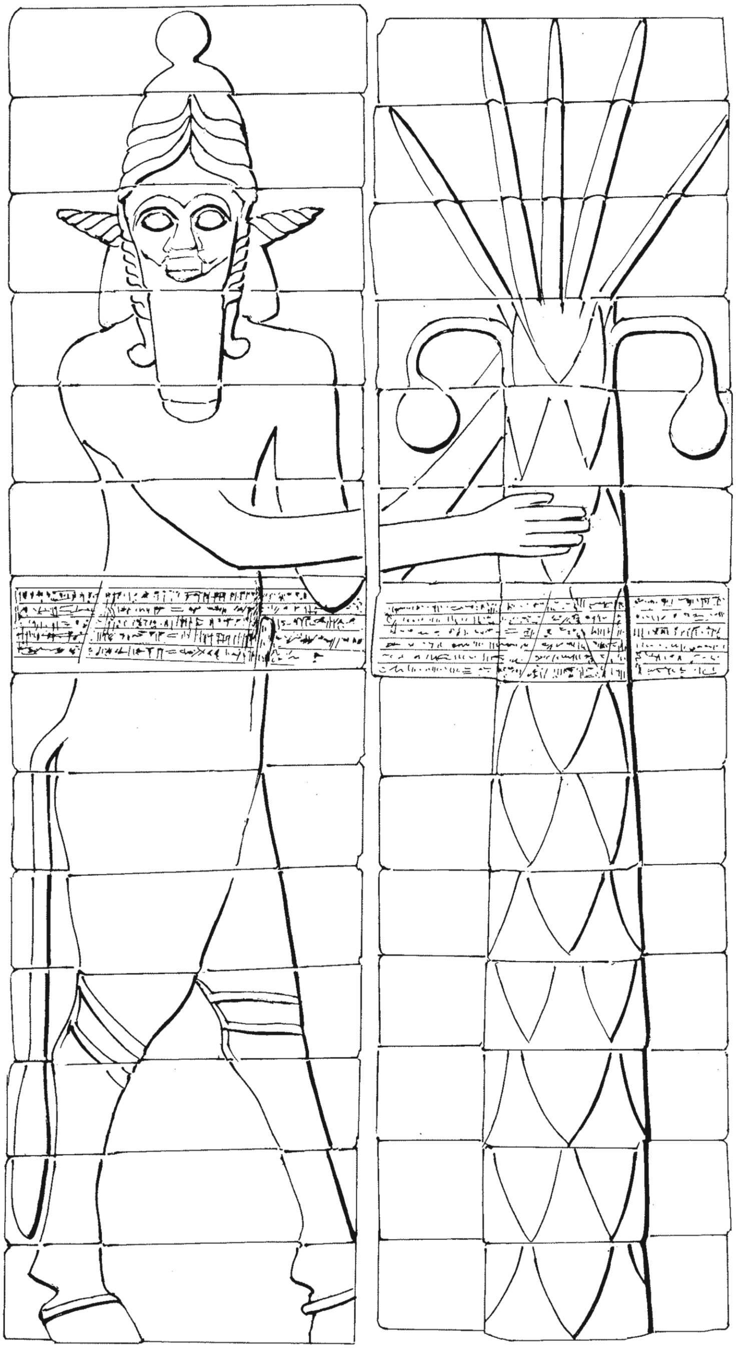
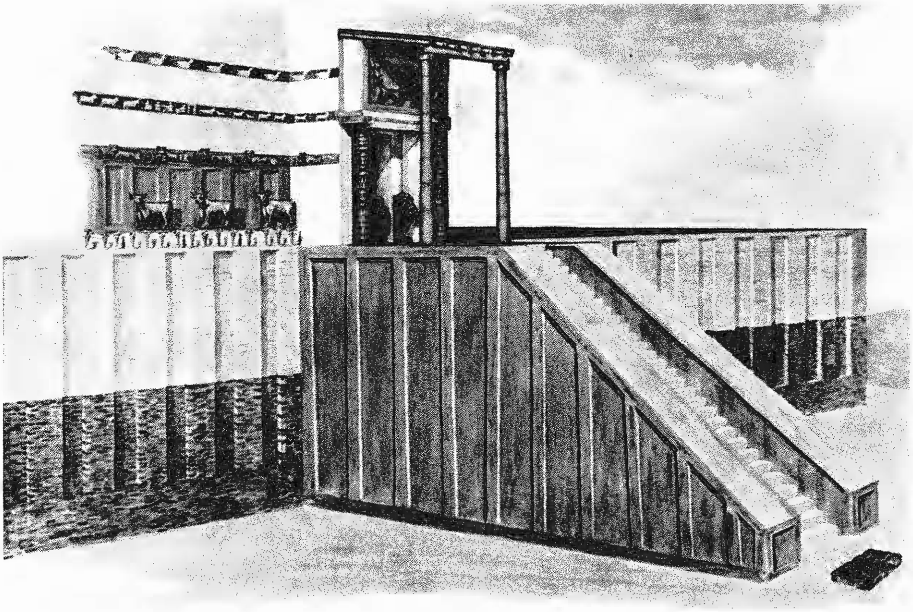


Fig. 86



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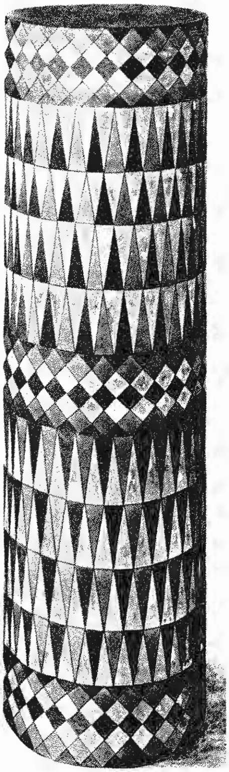

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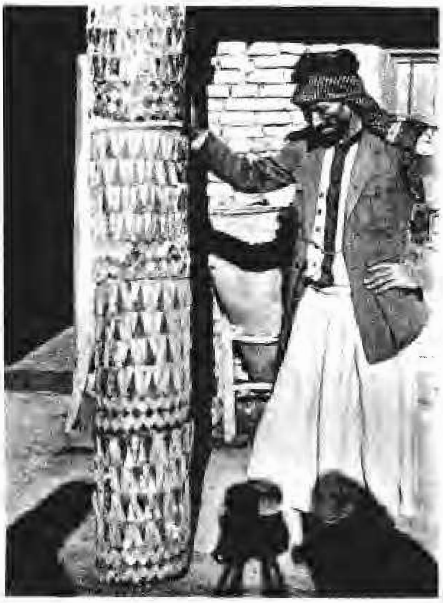

Fig. 89

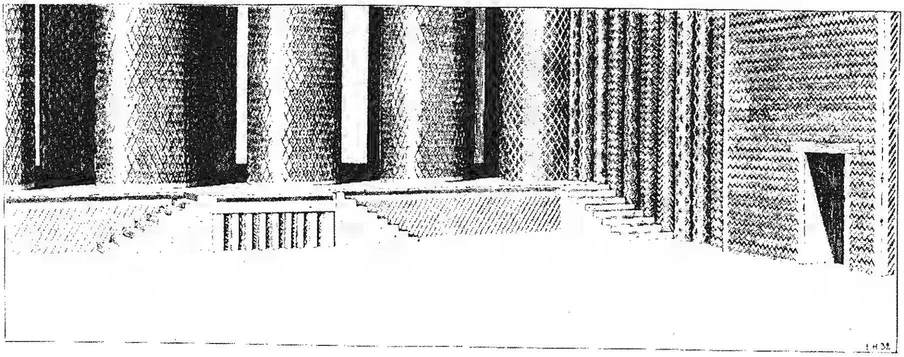

Fig. 90

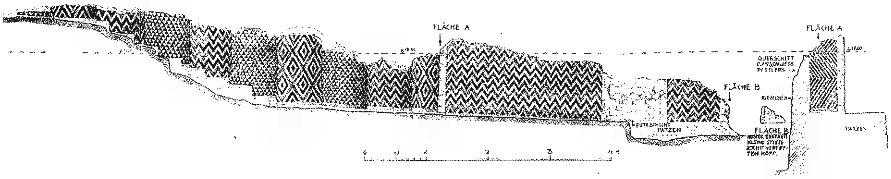
FLÄCHE A
FLÄCHE A
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Fig. 91

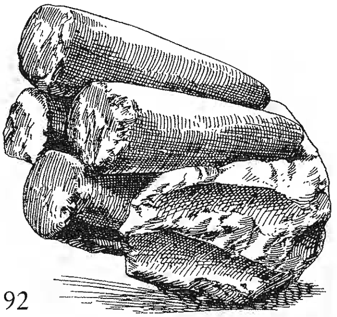


Fig. 92

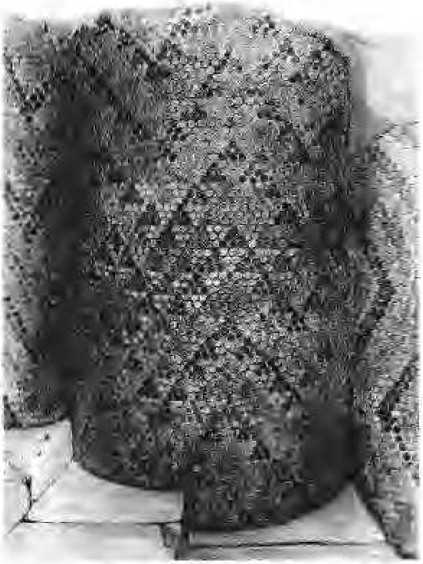


Fig. 93

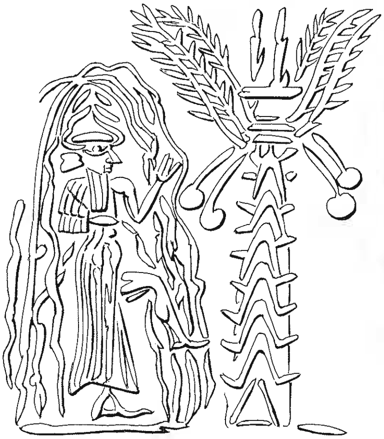


Fig. 94

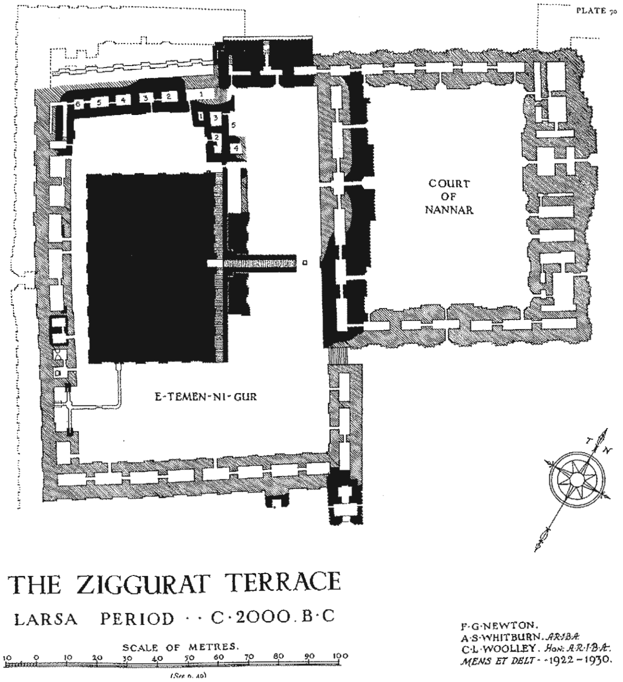
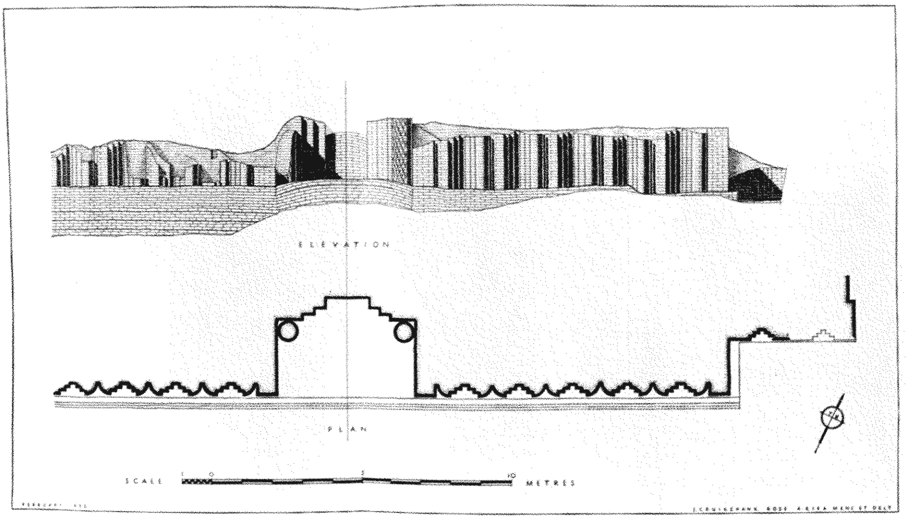


PLATE 70
1
2
3
4
5
6
COURT
OF
NANNAR
E-TEMEN-NI-GUR
T
N
THE ZIGGURAT TERRACE
LARSA PERIOD · · C·2000.B·C
SCALE OF METRES.
10 0 10 20 30 40 50 60 70 80 90 100
(See p. 49)
F·G·NEWTON.
A·S·WHITBURN. AR.I.B.A.
C·L·WOOLLEY. Hon: A·R·I·B·A.
MENS ET DELT · ·1922 – 1930.

Fig. 95


ELEVATION
PLAN
SCALE
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5
10
METRES

Fig. 96

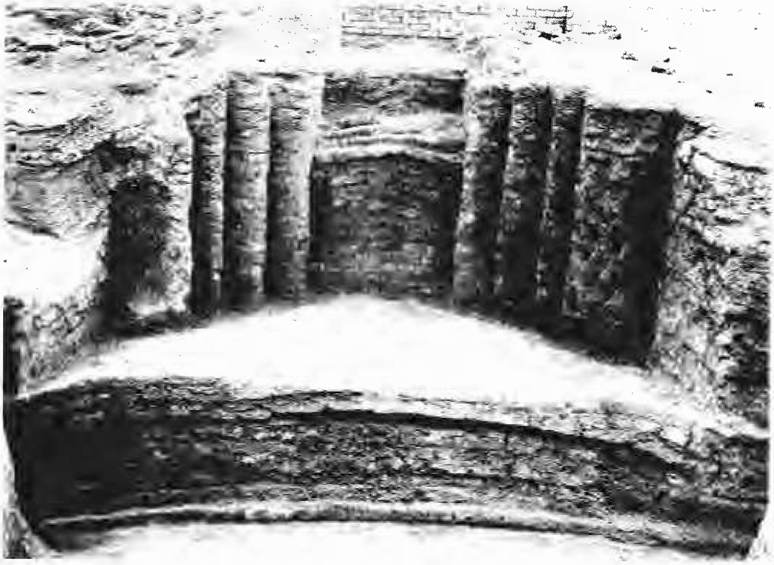

Fig. 97

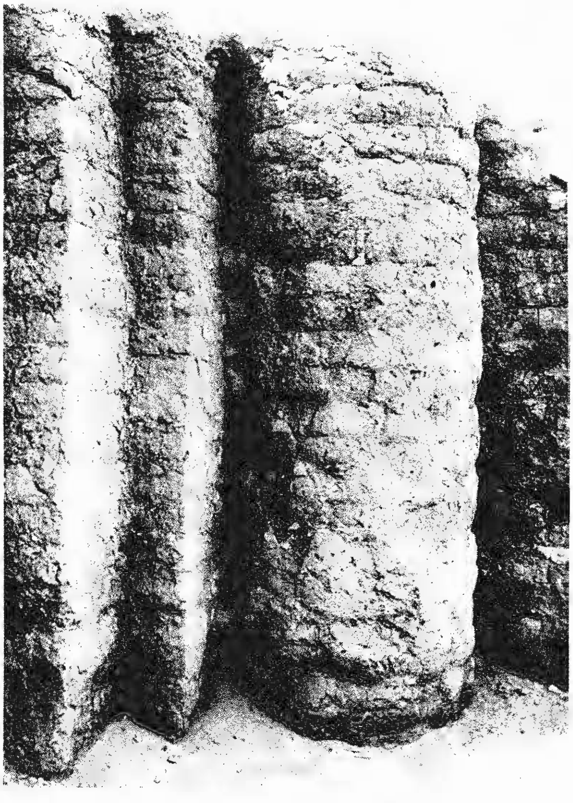

Fig. 98

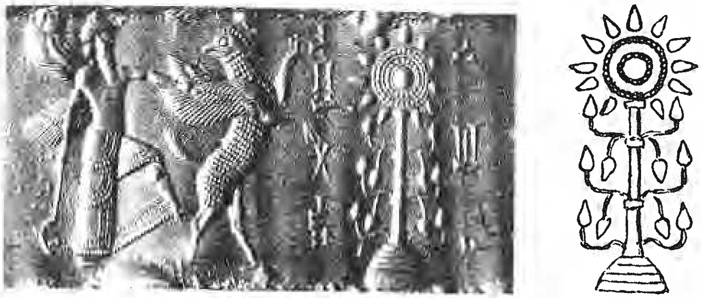

Fig. 99

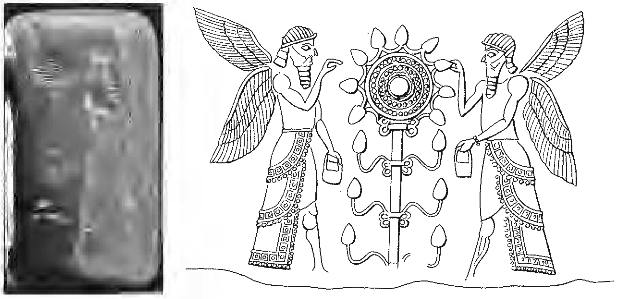

Fig. 100

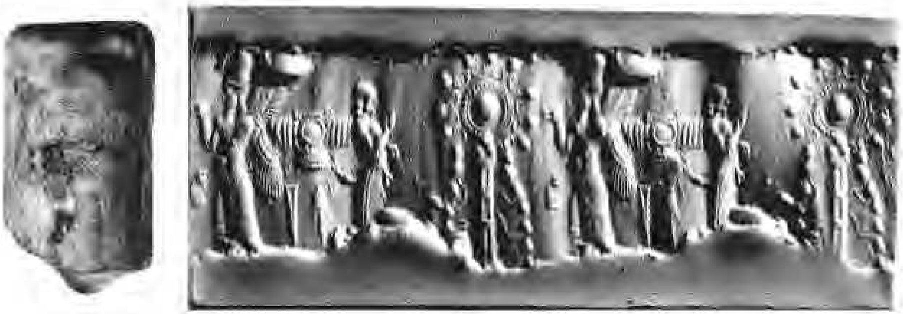

Fig. 101

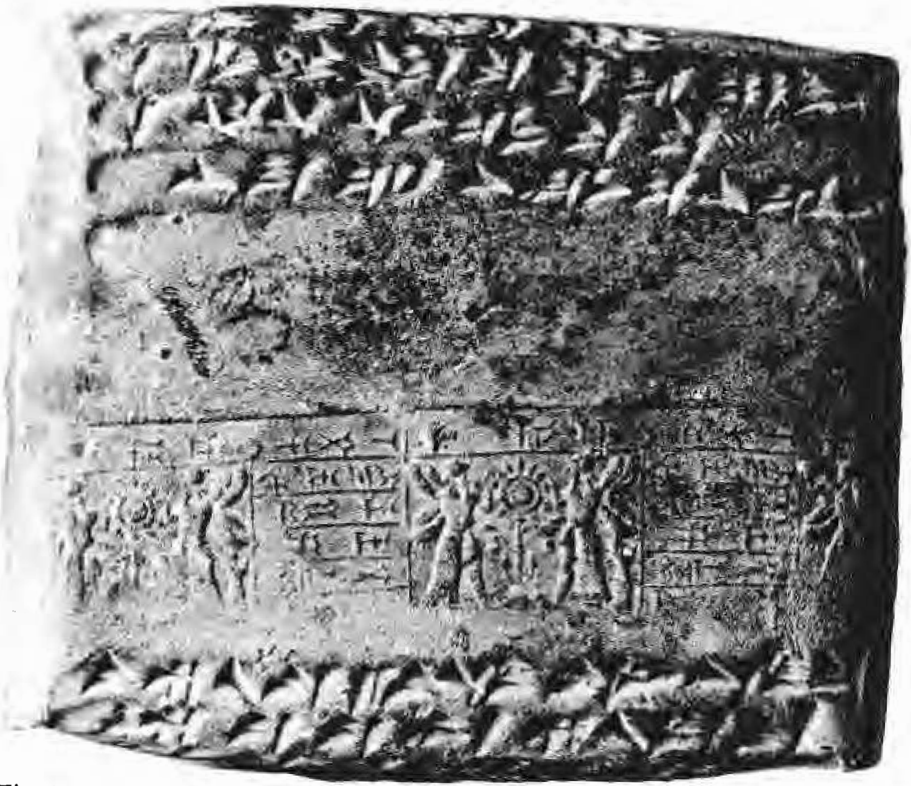

Fig. 102

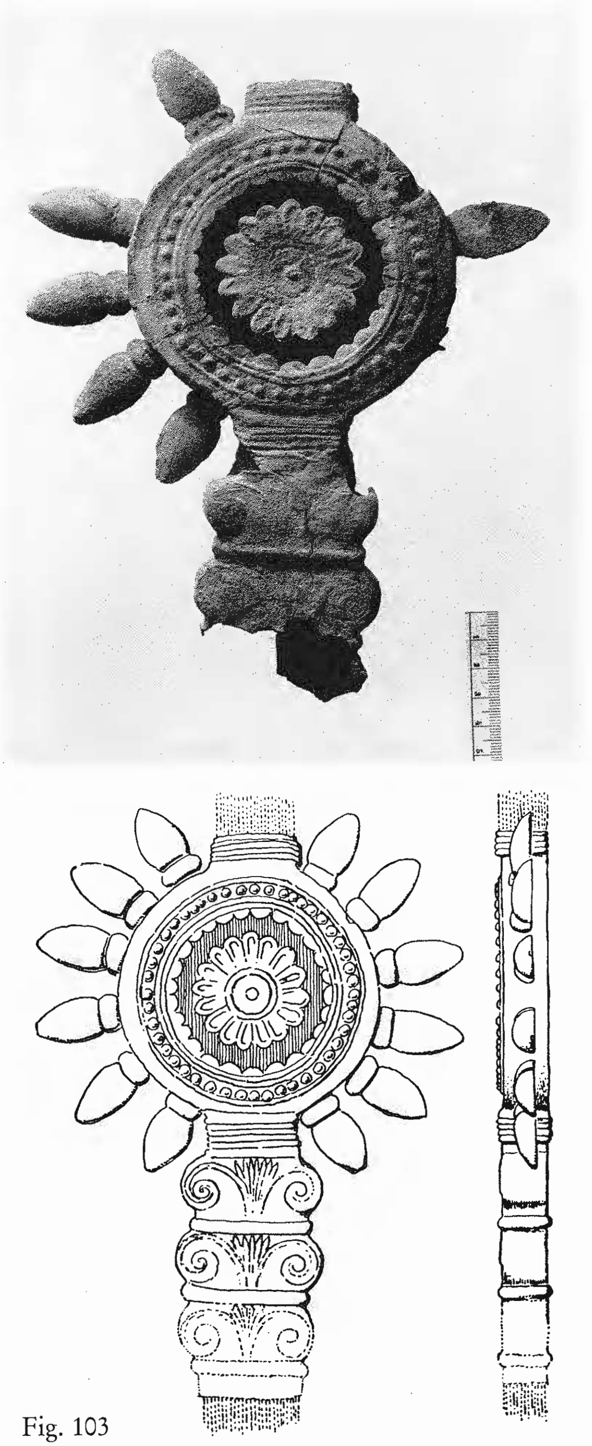

Fig. 103

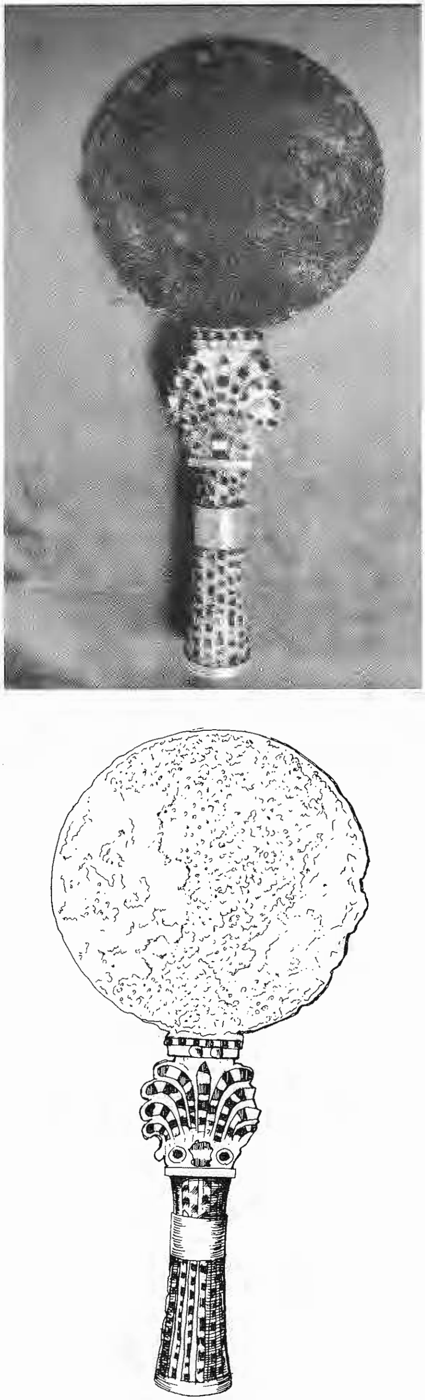

Fig. 104

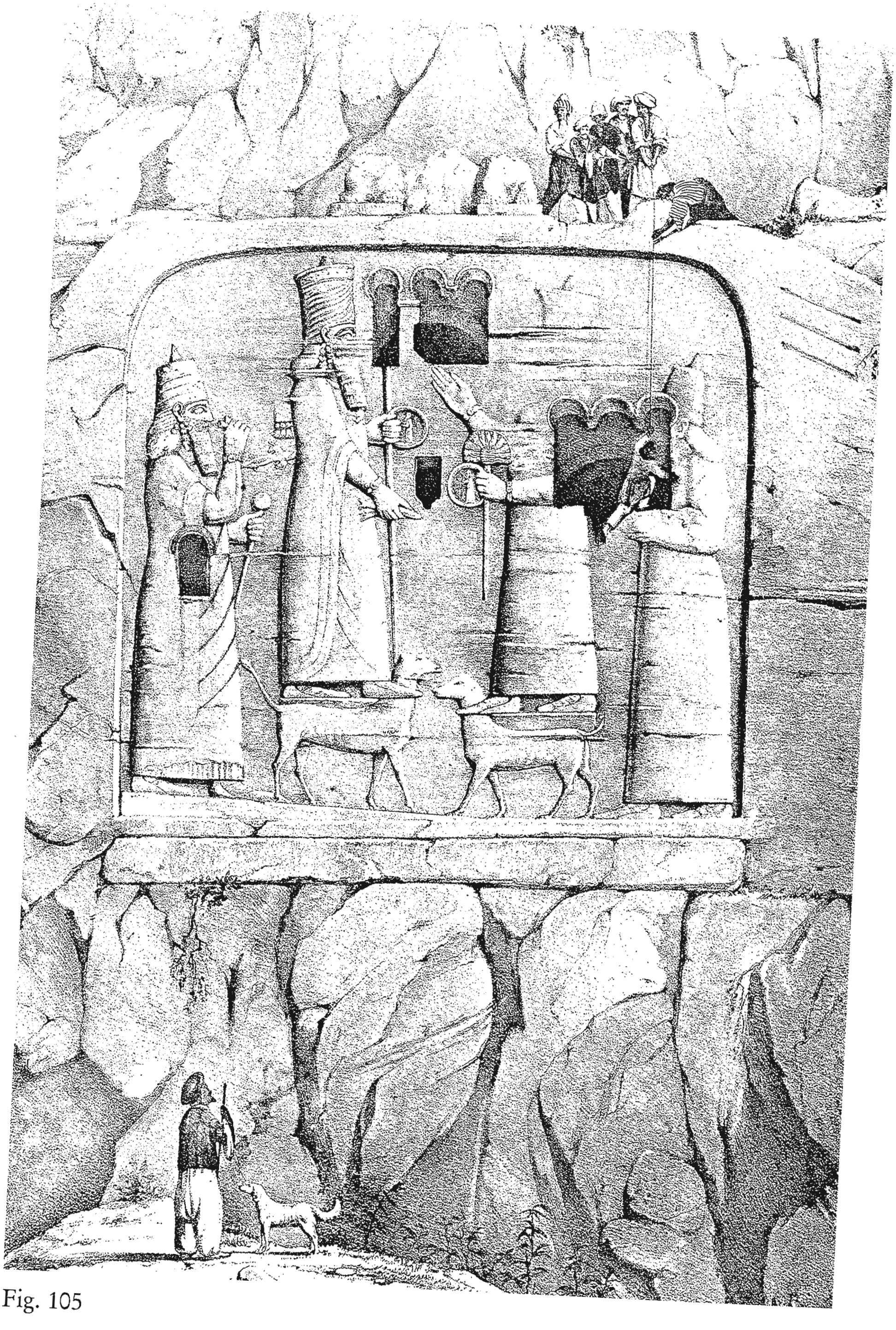

Fig. 105

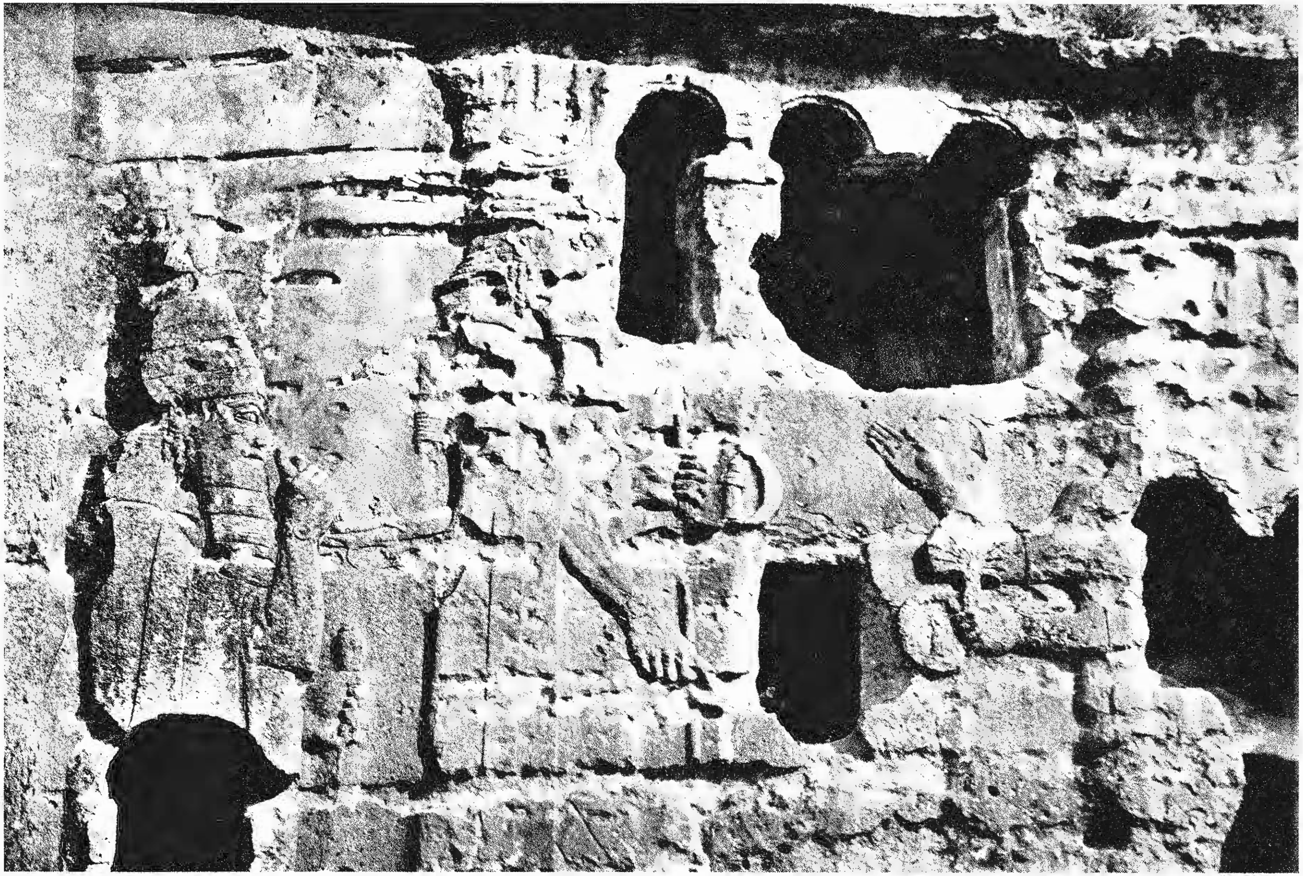

Fig. 105 continued

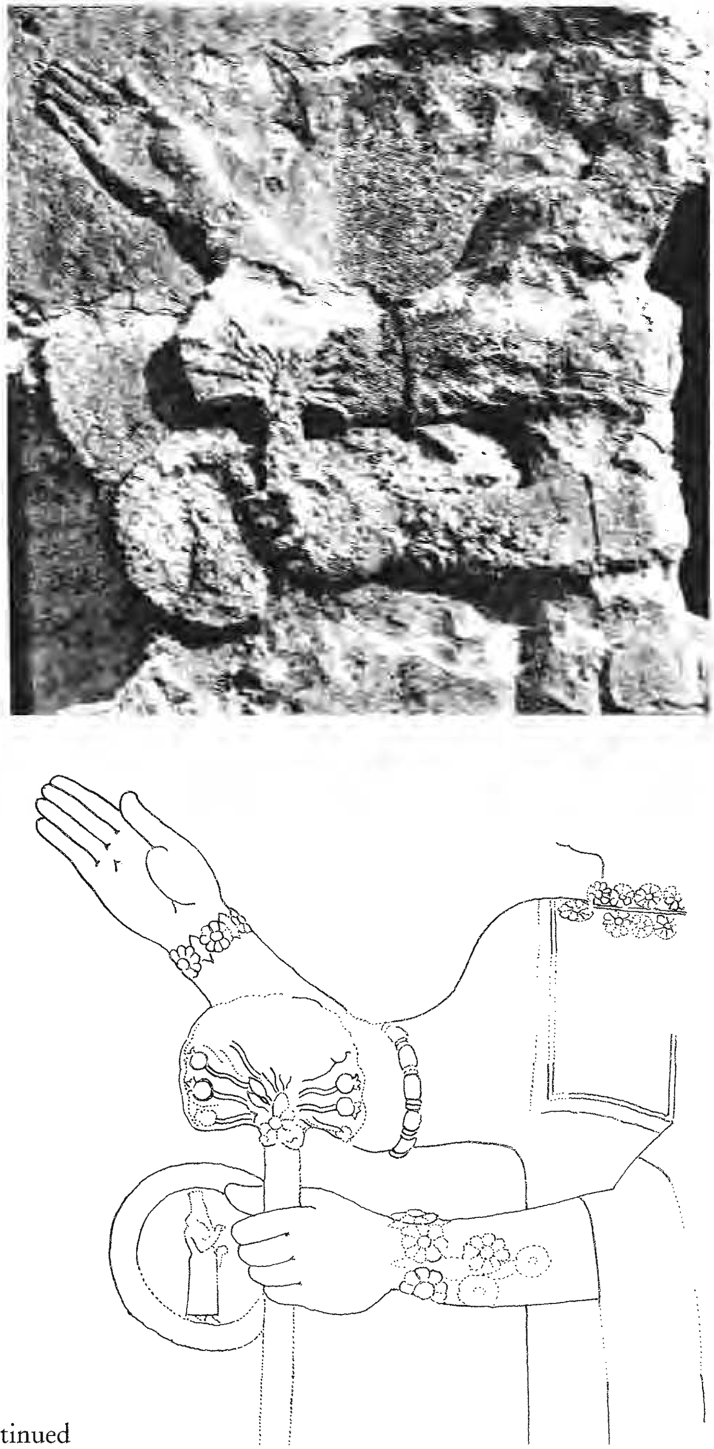

Fig. 105 continued

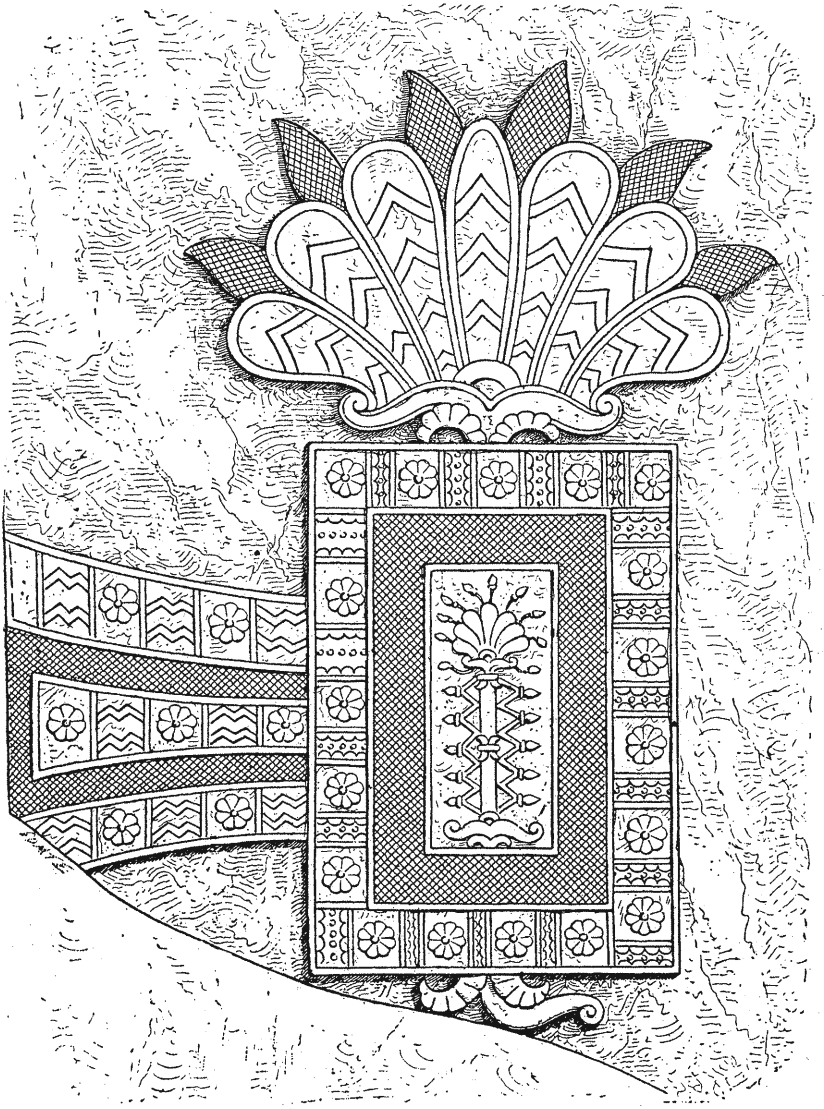

Fig. 106

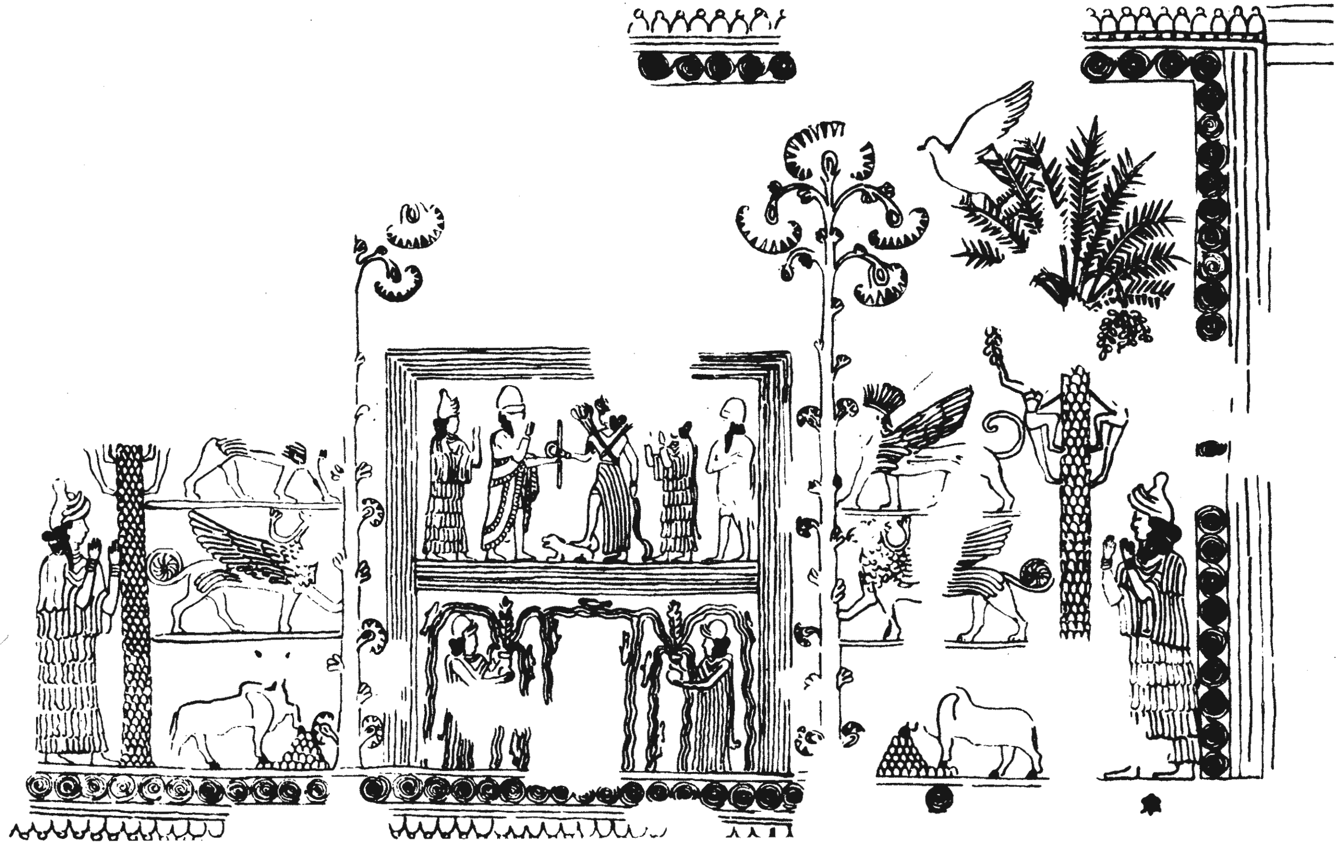

Fig. 107

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Abstract

The so-called Assyrian sacred tree is the most discussed motif in the historiography of Assyrian art. It is familiar from the reliefs in the throneroom of Aššurnasirpal II at Nimrud, but it has a family of close relatives that appear in a variety of other media.

To date, no contemporary text has been found that mentions this 'tree,' and, as a result, scholars have not yet arrived at a consensus on its iconography. Nevertheless great efforts have been made to decipher the symbol, ever since A. H. Layard recovered the Nimrud reliefs in the mid-nineteenth century. This book traces the intricate history of the iconographic debate, from 1849 to the present.

Scholars have tended towards three principal interpretations of the sacred tree: that it represents the 'tree of life' known from Genesis, or a stylized date palm, or a constructed cult object. The 'tree of life' theory has had few takers since the late nineteenth century (although it has recently enjoyed a small revival); the date palm interpretation, on the other hand, has dominated the discussion since 1890, when E. B. Tylor proposed that winged figures standing on either side of the 'tree' were fertilizing it. This analysis has had a number of serious objections levelled against it from the beginning, but it managed to thrive, primarily because it built up a critical scholarly mass early on in the debate. The third of the main interpretations, the cult object theory, also fell victim to the date palm theory in the middle of the last century, and the details of its argument have been largely forgotten by recent contributors to the debate. In my view it is the most promising of the three, and I build upon the arguments of earlier cult object theorists using archaeological and textual material.

This book, then, is a critical historiography, which both surveys the vast literature on this topic and intervenes in the debate. It will be found invaluable by anyone who wishes to study this enigmatic motif, and it will also be of interest to historians of Assyrian art and religious cult. And as an analysis of the ways in which a scholarly debate can fall victim to an implausible consensus, it will provide a useful test case for students in the growing field of historiography.